

HEALTHCARE



Advanced infection control

Bacoban can easily be integrated into established disinfection plans. Bacoban disinfection is cost-effective while ensuring significantly higher control over the spreading of germs and viruses; thus, reducing re-infection and closing the **hygiene gap**.

Bacoban is safe to be used effectively in hospitals, doctor and dental surgeries.

Vaccinavirus test report **residual effect**_ASTM_Bacoban WB

- DIN EN 13727 2015 Bacoban WB - Evaluation of Bactericidal activity for use in the **medical area**
- DIN EN 13624 2013 Bacoban WB - Evaluation of Yeasticidal activity for use in the **medical area**
- DIN EN 14561 2006 Bacoban WB - Evaluation of Bactericidal activity for instruments use in the **medical area**
- DIN EN 14562 2006 Bacoban WB - Evaluation of Yeasticidal activity for instruments use in the **medical area**

Our Vaporiser, automatic, fast, dry and **long-lasting certified up to 10-day** disinfection in minutes. Read more about **“The New Way of Disinfection”**.

Healthcare-Associated Infections

Healthcare-associated infections, or infections acquired in healthcare settings, are the most frequent adverse event in healthcare delivery worldwide. Hundreds of millions of patients are affected by healthcare-associated infections each year, leading to significant mortality and financial losses for health systems (World Health Organization HAI Fact Sheet, 2014).

Methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus* (VRE), and *Clostridium difficile* are three bacteria commonly found in Canadian hospitals. They can cause symptoms ranging from asymptomatic colonization to septic shock and death.

Each year, about 8,000 Canadians die from hospital-acquired infections; 220,000 others get infected. **Treatment is costlier than prevention**; estimated costs for 2004 were \$82 million. Costs are estimated at \$129 million for 2010. That's \$12,216 per infected MRSA patient per year due to:

- Prolonged hospitalization
- Special control measures
- Expensive treatments
- Extensive surveillance

You can successfully reduce healthcare-associated infections with these five evidence-based infection control strategies:

- Establish an aggressive hand hygiene program
- Clean and decontaminate the environment and equipment
- Implement contact precautions for any patient infected or colonized with a superbug
- Perform MRSA and VRE screening surveillance on admission and at other times
- Regularly report superbug infection rates to frontline and hospital leaders

The U.S. Department of Health and Human Services (HHS) has identified the reduction of HAIs as an Agency Priority Goal. HHS is committed to reducing the national rate of HAIs.

Although significant progress has been made in preventing some healthcare-associated infection types, there is much more work to be done. **On any given day, about one in 31 hospital patients has at least one healthcare-associated infection.**

Common HAIs that patients get in hospitals include:

- Central-line associated bloodstream infections (CLABSI)
- **Clostridium difficile infections**
- Pneumonia
- **Methicillin-resistant *Staphylococcus aureus* (MRSA) infections**
- Surgical site infections
- Urinary tract infections

Lack of infection control practices facilitates transmission of infection from patients to health care workers, other patients and attendants. It is therefore important for all health care workers, patients, their family members, friends and close contacts to adhere to the infection control guidelines strictly.

HAI – The New Dimension in Infection Control

Bacoban – A leader in quality improvement by implementing new standards of cleaning and disinfection.

Bacoban is certified and it is safe to be used effectively in hospitals, clinics,



Best Practices for Environmental Cleaning in Healthcare Facilities

High touch surfaces include, but are not limited to:

- bed rails
- bed frames
- moveable lamps
- tray table
- bedside table
- handles
- IV poles
- blood-pressure cuff
- The outlets, the cables, instruments ...



Most common germs behind HAI's

Bacteria:

Staphylococcus aureus, (one of the main species causing infections that originate from within the hospital environment due to its ability to withstand dryness for long periods of time and form infection colonies that are likely to contaminate healthcare providers' hands and patients directly.) Staphylococcus aureus is also the most common cause of staph infections, including methicillin-resistant Staphylococcus aureus (MRSA), the drug-resistant infection that is a growing problem in hospitals. Pseudomonas aeruginosa, (ability to spread easily particularly when treating patients suffering from cystic fibrosis who may become contaminated by their environment), Escherichia Coli.

Fungi:

Aspergillus niger and Candida albicans.

While Bacoban offers proven anti-pathogen protection, it is important to stress that regular and appropriate infection procedures should be maintained alongside.

Mobile equipment disinfection

One area that is often overlooked that presents a risk to patients and hospital staff is the proper disinfection of mobile equipment which plays a 50% fight against infections acquired while receiving treatment. Medical equipment, wheelchairs, IV poles, computers, workstations are all touched numerous times a day by patients, visitors and staff. Pathogens spread between individual and equipment, and bacteria spreads from one section of the hospital to another.

High contact surfaces in patient treatment areas need to be cleaned and disinfected frequently. The ease of cleaning is also clearly an important consideration for healthcare facilities since cleaning and disinfection needs to cover the range for medical equipment and highly sensitive care units including housekeeping surfaces such as doorknobs, bedrails, washing facilities and toilets in patients' rooms.

MRSA - Methicillin-resistant Staphylococcus aureus (MRSA) infections

VRE - Vancomycin-resistant Enterococci in Healthcare Settings

Clostridioides difficile is formerly known as **Clostridium difficile** and often called **C. difficile** or **C. diff.**

DOCUMENTATION

MRSA - Methicillin-resistant Staphylococcus aureus (MRSA) infections

General Information

What is MRSA?

MRSA stands for methicillin-resistant Staphylococcus aureus, a type of bacteria that is resistant to several antibiotics.

Outside of Healthcare Settings

In the community (where you live, work, shop, and go to school), MRSA most often causes skin infections. In some cases, it causes pneumonia (lung infection) and other infections. If left untreated, MRSA infections can become severe and cause **sepsis**—the body's extreme response to an infection.

In Healthcare Settings

In places such as a hospital or nursing home, MRSA can cause severe problems such as

- bloodstream infections
- pneumonia
- surgical site infections

Methicillin-resistant Staphylococcus aureus (MRSA) refers to types of staph that are resistant to a type of antibiotic methicillin. MRSA is often resistant to other antibiotics, as well. While 33% of the population is colonized with staph (meaning that bacteria are present, but not causing an infection with staph), approximately 1% is colonized with MRSA.

Workers who are in frequent contact with MRSA and staph-infected people and animals are at risk of infection. These included those in hospitals and healthcare facilities, correctional facilities, daycare facilities, livestock settings, and veterinary clinics.

Can I get MRSA from my work?

MRSA is transmitted most frequently by direct skin-to-skin contact or contact with shared items or surfaces (e.g., towels, used bandages) that have come into contact with someone else's infected site. Animals with MRSA can also transfer the infection to people who frequently handle them. However, people are usually the originating source of the infection in animals.

MRSA skin infections can occur in any type of workplace. However, some workplace settings have factors that make it easier for MRSA to be transmitted. These factors, referred

to as the 5 C's, are as follows: Crowding, frequent skin-to-skin Contact, Compromised skin (i.e., cuts or abrasions), **Contaminated items and surfaces, and lack of Cleanliness.** Locations where the 5 C's are common include schools, dormitories, military barracks, athletic gyms, households, correctional facilities, daycare centers, and areas where animal handling is common, such as veterinary clinics and livestock settings.

How common is MRSA?

Approximately 5% of patients in U.S. hospitals carry MRSA in their nose or on their skin.

How can I prevent a MRSA Infection?

You can take these steps to reduce your risk of MRSA infection:

- Maintain good hand and body hygiene. Clean hands often, and clean your body regularly, especially after exercise
- Keep cuts, scrapes, and wounds clean and covered until healed
- Avoid sharing personal items such as towels and razors
- Get care early if you think you might have an infection

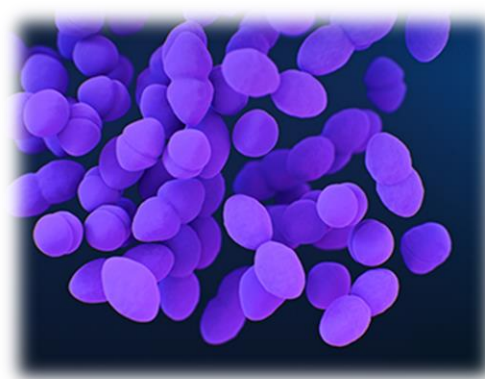
What are symptoms of MRSA Infection?

The symptoms of a MRSA infection depend on the part of the body that is infected. For example, people with MRSA skin infections often can get swelling, warmth, redness, and pain in infected skin. In most cases it is hard to tell if an infection is due to MRSA or another type of bacteria without laboratory tests that your doctor can order. Some MRSA skin infections can have a fairly typical appearance and can be confused with a spider bite. However, unless you actually see the spider, the irritation is likely not a spider bite.

Most *S. aureus* skin infections, including MRSA, appear as a bump or infected area on the skin that might be:

- red
- swollen
- painful
- warm to the touch
- full of pus or other drainage
- accompanied by a fever

Vancomycin-resistant Enterococci (VRE) in Healthcare Settings



Enterococci are bacteria (germs) that are normally present in the human intestines and in the female genital tract, and are often found in the environment, like in soil and water. These bacteria can cause infections.

Antibiotic Resistance Threats in the United States, 2019. Enterococci bacteria are constantly finding new ways to avoid the effects of the antibiotics used to treat the infections they cause. Antibiotic resistance occurs when the germs no longer respond to the antibiotics designed to kill them. If these germs develop resistance to vancomycin, an antibiotic that is used to treat some drug-resistant infections, they become vancomycin-resistant enterococci (VRE).

In 2017, VRE caused an estimated 54,500 infections among hospitalized patients and 5,400 estimated deaths in the United States.

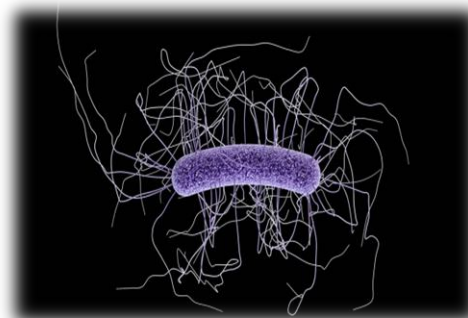
How is it spread?

VRE can spread from **one person to another through contact with contaminated surfaces or equipment** or through person to person spread, often via contaminated hands. **It is not spread through the air by coughing or sneezing.**

What is C. diff?

Clostridioides difficile (also known as *C. diff*) is a bacterium that causes diarrhea and colitis (an inflammation of the colon). Most cases of *C. diff* occur while you're taking antibiotics or soon after you've finished taking antibiotics. *C. diff* can be deadly.

It's estimated to cause almost **half a million illnesses in the United States each year.**



About 1 in 6 patients who get C. diff will get it again in the subsequent 2-8 weeks.

Within a month of diagnosis, 1 in 11 people over age 65 died of a healthcare-associated C. diff infection.

Risk Factors for C. diff

- Most cases of C. diff occur when you've been taking antibiotics.
- There are other risk factors:
 - Being 65 or older
 - Recent hospitalizations
 - A weakened immune system
 - Previous infection with C. diff or known exposure to the germs

Is C. diff contagious?

Yes. To keep from spreading C. diff to others:

- Wash hands with soap and water.
- Try to use a separate bathroom if you have diarrhea.
- Take showers and wash with soap.
- Clean and disinfect surfaces

Contact us for more information

info@bacobaninternational.com