INPATIENT AND DAY HOSPITALS

Message from Our Team

Dear Colleagues,

Welcome to the Spring edition of our newsletter. Spring is just around the corner and many of us will be welcoming the warmer weather which will hopefully see a decrease in the continuing current high acute respiratory illness activity in the community.

This is again a bumper issue with many interesting articles. We have put the spotlight on *Pseudomonas aeruginosa*, a bacteria commonly found in the environment, especially wet/damp places, which is becoming an increasing problem in healthcare. You may be surprised at some of the places it has been found.

Our feature article, which resonated with our team when conducting IPC risk assessments, discusses *Safe Injection, Infusion, Medication vial, and Point-of-care Testing Practices in Health Care*. Some key issues that we often identify are among the recommendations made. And those of you involved in reprocessing of RMD may relate to the two articles discussing manufacturer's instructions for use (IFU), and how well they can be followed.

As usual, links are provided with each item throughout the newsletter for easy access to the full articles. We hope you enjoy all the articles and would welcome any feedback about the newsletter, or suggestions for other things you would like to see included in future editions.

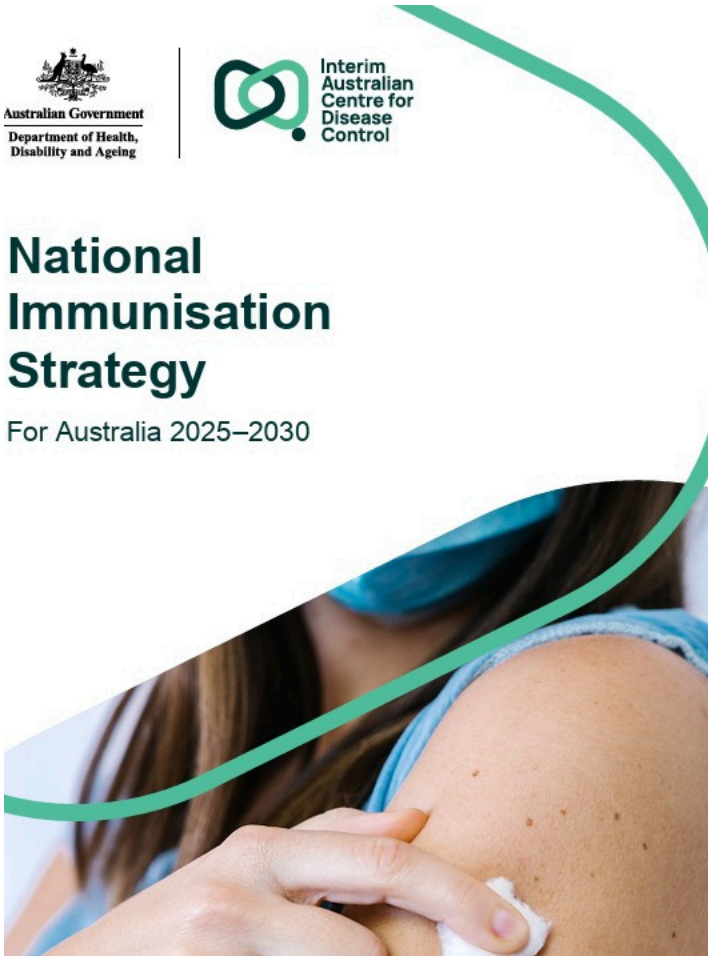
Until next time, look after yourselves, stay well and keep warm.

In This Issue We Have

IMMUNISATION UPDATES

National Immunisation Strategy for Australia 2025–2030

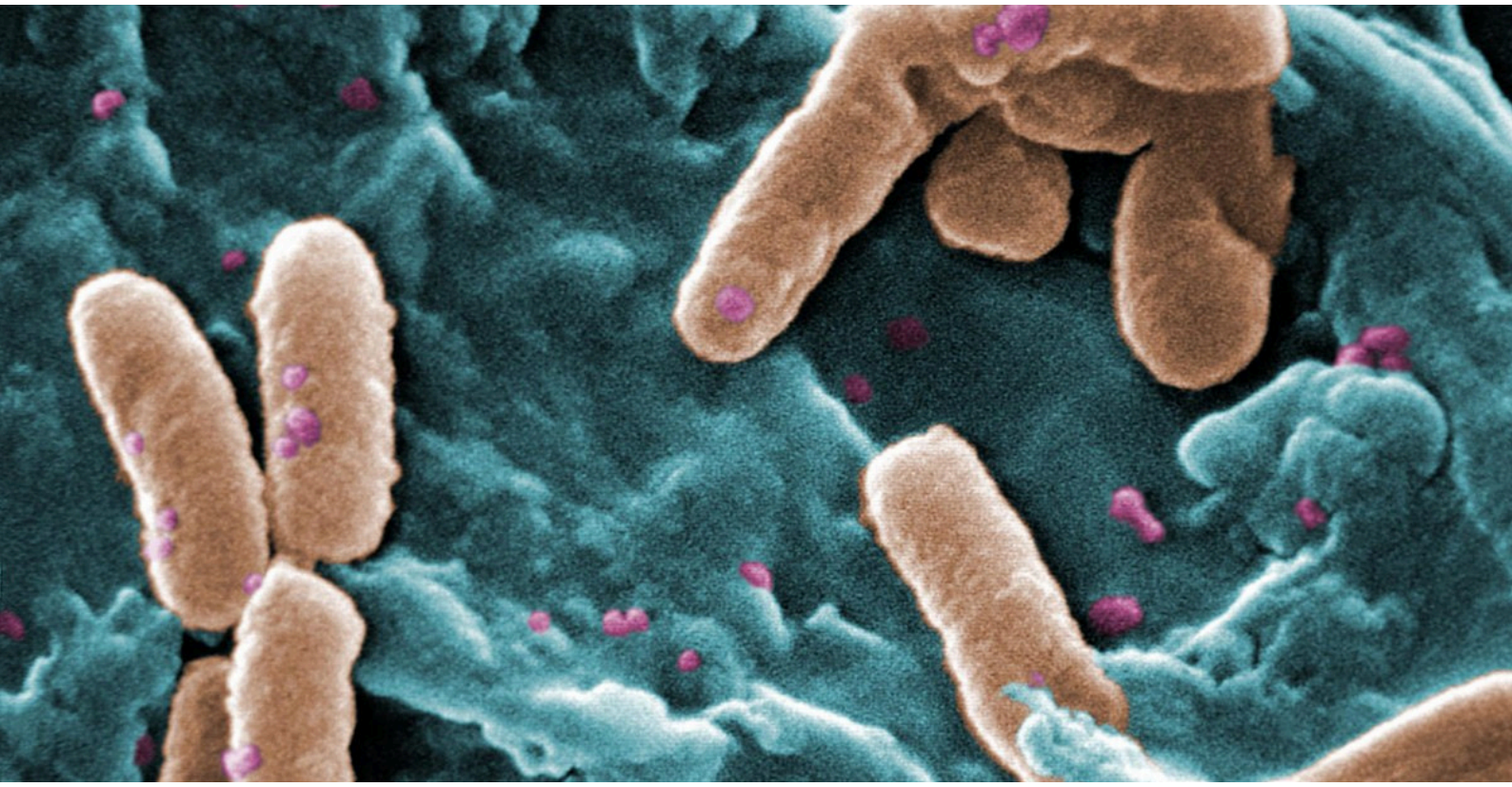
The Australian Department of Health, Disability and Ageing has released the National Immunisation Strategy for Australia 2025 – 2030 setting a framework for achieving the vision for a healthier Australia through immunisation. The strategy provides a roadmap to increase and sustain immunisation rates in Australia over the next 5 years to reduce the impact of vaccine-preventable diseases through high uptake of safe, effective, and equitable immunisation across the lifespan of the Australian population.



The strategy takes a holistic approach and is built on 6 priority areas:

- Improving access to immunisation
- Building trust and understanding of immunisation within communities
- Enhancing data use to target immunisation strategies and monitor performance
- Strengthening the immunisation workforce
- Harnessing new technologies to respond to evolving vaccine landscapes
- Implementing sustainable reform in vaccine program governance and accountability

For more details, access the full strategy here.



Spotlight Organism

Pseudomonas aeruginosa

Pseudomonas is a group of bacteria commonly found in the environment, i.e. soil and water. The most common type that causes infections in humans is *Pseudomonas aeruginosa*, and can cause infections in the blood, lungs, urinary tract or other parts of the body following surgery. Some types are resistant to nearly all antibiotics, including carbapenems.

P. aeruginosa can use a wide range of sources to obtain nutrients for growth, and can survive in different levels of oxygen, meaning it can live almost anywhere. It can grow in liquid and as a layer of cells on a surface, called a biofilm, helping it to thrive in both natural and artificial settings. It is commonly found in water, soil, fruit and vegetables and is transmitted from contact with:

- Contaminated surfaces or equipment
- Exposure in soil or water – drains, sinks, humidifiers, kitchens, fruit, vegetables
- Person-to-person contact from contaminated hands.
- Other places it is often found, such as:
  - Cleaning supplies e.g. mops
  - Swimming pools and hot tubs
  - Contact lenses or contaminated lens solution
  - Body piercings or body piercing equipment
  - Nail salon equipment
  - Soap bars
  - Toothbrushes
  - Ice machines

Several outbreaks of *P. aeruginosa* have been attributed to contaminated water systems in hospitals, with sinks, drains and toilets in healthcare settings becoming contaminated and infecting patients. This can occur through direct contact, sprays, splashes or through inhalation. It can also survive in disinfectant solutions if these are not changed regularly, and use of colonised solutions can contaminate large areas of surfaces with *P. aeruginosa* if they are used for cleaning.

Infections and Risk

Having spread around the world, *P. aeruginosa* is estimated to cause around 7% of all healthcare-associated infections, and nearly a quarter of all infections are acquired in intensive care units. Patients in healthcare settings are at highest risk, particularly those who:

- Have an open wound from surgery
- Are being treated for burns
- Use a breathing machine, catheter, or any other medical device
- Have diabetes
- Have cystic fibrosis or another chronic lung issue
- Have a health condition that weakens your immune system, such as HIV
- Take medications that suppress your immune system, such as those for cancer

Signs and symptoms of *P. aeruginosa* infection vary depending on the location of the infection and include:

- Ears: Pain and discharge
- Skin: Rash, including pimples filled with pus
- Eyes: Pain, redness, swelling
- Bones or joints: Joint pain and swelling; neck or back pain that lasts weeks
- Wounds: Green pus or discharge that may have a fruity smell
- Digestive tract: Headache, diarrhea
- Lungs: Pneumonia; severe coughing and congestion
- Urinary tract: Urinary tract infections (UTIs)
- Fever is also often a sign of a severe Pseudomonas infection.

Complications that can arise from *P. aeruginosa* infection include:

- A secondary infection. Taking antibiotics raises your risk of a *Clostridioides difficile (C. diff)* infection. Common symptoms include diarrhea and mild stomach pain.
- Antibiotic resistance. If your infection doesn't respond to antibiotics, that can lead to more doctor visits, hospital stays, higher medical costs, and side effects from the treatments. Your symptoms from the initial infection will also continue and could worsen.
- Sepsis. In this, your immune system begins attacking your organs.
- Organ failure. An untreated or severe infection can damage vital organs.

Treatment and Drug Resistance

- *P. aeruginosa* infections are typically treated with antibiotics, although the bacteria's high resistance makes finding the right one a challenge. Treatment may involve a combination of drugs

from classes like aminoglycosides, fluoroquinolones, carbapenems, and β-lactams, with intravenous (IV) administration for severe cases.
- Like other Gram-negative bacteria, *P. aeruginosa* is naturally resistant to antibiotics because of its protective outer layer, which blocks drugs from entering the bacterial cell. Even if antibiotics do manage to penetrate this outer layer, *P. aeruginosa* can pump them back out again using numerous efflux pumps.
- Moreover, *P. aeruginosa* has acquired many different drug resistance mechanisms.

Management

- Antibiotic treatment
- Implementation of contact precautions
- Isolation, single room or cohort
- Enhanced environmental cleaning and disinfection using a TGA listed disinfectant with stated efficacy against *P. aeruginosa*

Prevention

- Hand hygiene
  - Between patients (Moments 1 and 4)
  - Before and after caring for wounds, invasive devices, or handling medical devices (Moments 2 and 3)
- Effective environmental cleaning of patient care areas
- A facility water risk management plan that includes *P. aeruginosa*, not just Legionella
- Not using hand wash / clinical basins to dispose of drugs or clinical waste, to minimise contamination and biofilm development
- Taps should not discharge directly into the drain, to minimise splash contamination
- Keeping surrounds of hand wash basins clear to prevent splash contamination
- Using plumbing fixtures and fittings (e.g. taps, basin designs) that are easy to clean
- Not topping up containers of cleaning agents and disinfectants
- Teaching and encouraging patients to dry skin folds well after showering or bathing

Drug-resistant *P. aeruginosa* infections are a global threat. Of special concern is the marked rise of *P. aeruginosa* strains resistant to carbapenems, a class of last-resort antibiotics, because in this case safe and efficacious treatment options are very limited.

IN THE LITERATURE

Educational Needs for Infection Prevention and Control (IPC) During Outbreaks: A qualitative study with health workers in Sri Lanka

Protecting the health workforce is essential to health systems resilience for emerging infectious diseases (EID) outbreaks. Healthcare workers (HCWs) in low and middle income countries (LMICs) must be protected before, during and after emergencies. During epidemics and pandemics, HCWs carry a significant physical, social, and emotional burden caring for patients during complex and prolonged public health emergencies. Yet HCWs in many LMICs lack the resources and up-to-date training to consistently and safely carry out these responsibilities during crises.

This study explored healthcare workers (HCWs) perceptions of IPC guidelines and training needs for managing the COVID-19 pandemic in Sri Lanka. This study is part of a larger study which aims to create role specific IPC guidelines for HCWs in LMICs.

Sixteen semi-structured interviews were conducted among hospital and public health HCWs including physicians, nurses, midwives, and support staff (e.g. cleaning services).

Some of the issues identified included:

- Insufficient resources, including PPE
- Guidance on IPC measures, including type of PPE required and isolation requirements, are often evolving and not yet contextualised to the available resources in LMICs
- During public health emergencies: resource rationing, HCW illness and onboarding of new and different types of HCW often leads to task shifting
- Newly formed teams, taking on new roles and tasks require guidance and focussed training on IPC best practices
- Whilst HCWs in clinical settings are often conceptualized as doctors, nurses and allied health professionals, outbreaks require a broadening of who is on the front line
- Support staff (e.g. cleaning staff) also need comprehensive IPC training to safely carry out their tasks, which are essential to giving care.

The COVID-19 pandemic highlights the importance of multi-modal training, testing and easy access to all training material. The findings illustrate the need for a tailored approach to IPC education based on identified overall and key specific needs (e.g. training support staff). Education on IPC must be ongoing

and extended to all HCWs to benefit not only emergency preparedness, but other health system goals including patient safety and preventing antimicrobial resistance.

This study has lessons for all types of health service providers.

Read the full article HERE

Optimizing Training for Environmental Services Staff: A Critical Component of Patient Safety and Infection Control.

Effective environmental services (EVS) are critical in maintaining a safe and healthy health care environment. Properly trained housekeeping staff are essential in preventing healthcare associated infections (HAIs). Additionally, EVS leaders must possess supervisory skills and advanced knowledge of cleaning protocols to ensure high hygiene standards.

Proper training equips housekeeping staff with the skills to clean and disinfect effectively, reducing microbial loads on surfaces and minimising infection risks. Key aspects of training should include:

- Understanding pathogen transmission, including how pathogens spread and which surfaces are most likely to harbour infectious agents.
- Proper use of cleaning agents, emphasising appropriate selection, dilution and application, and ensuring compliance with manufacturer's guidelines.
- Personal Protective Equipment (PPE): selecting appropriate PPE, correct donning, doffing and disposal to protect themselves and prevent cross-contamination.

Evidence suggests enhanced cleaning protocols and staff education significantly reduce the incidence of HAIs. Inadequate cleaning and disinfection can lead to unsafe environments, putting patients, staff and visitors at risk. Effective training prevents accidents and infections, and fosters a culture of accountability and professionalism.

EVS leaders play a pivotal role in ensuring the effectiveness of EVS teams. Properly trained leaders provide effective oversight, motivation and guidance to their teams.

The economic impacts of proper training yields substantial economic savings for health care facilities. Effective training reduces the costs associated with HAIs by preventing HAIs and minimising hospital readmissions (and admissions from aged care facilities). Trained staff also improve operational efficiency, reduce turnover rates and the need for corrective actions.

A robust training program should include:

- Initial comprehensive orientation.
- Ongoing education and regular competency assessments.
- Tailored modules to address specific needs such as biohazard handling.
- Feedback mechanisms to identify gaps in training and opportunities for improvement.

In summary, investing in the professional development of housekeeping staff protects patients, and staff, and delivers significant economic and reputational benefits.

Read the full article HERE

The Conflict with Manufacturer's Instructions for Use (IFU)

Today there are thousands of non-critical medical devices in more than 100 different categories in an average hospital that require low to intermediate level cleaning and disinfection. Cleaning and disinfection of reusable medical devices (RMD) can be performed by many healthcare workers (HCWs), including nurses, technicians, nursing assistants, radiology staff, occupational and physical therapy staff, and others. Technology has advance over the past 30 years and some non-critical RMD are complex devices which require more time for cleaning and disinfecting and may require a HCW to have more advanced training to perform the task. The requirement for a manufacturer's IFU began in the USA after the Centre for Disease Control and Prevention (CDC) reported several outbreaks of *Carbapenem-resistant Enterobacteriaceae* at several large medical centres to the Food and Drug Administration (FDA). Whilst a serious issue, it involved semi-critical RMDs, not non-critical RMDs.

Many health care facilities now find themselves with multiple IFU's requiring multiple different cleaning agents and disinfectants. All IFU cleaning and disinfecting instruction require the information to be validated.

In Australia, the manufacturer is required by the Therapeutic Goods Administration (TGA) to provide an IFU detailing the safe and effective use of any device, including validated cleaning and disinfecting instructions.

Read the full article HERE

Flawed From the Start: Why Many IFUs for Surgical Instruments Fail in Real-World Sterile Processing

Continuing the above theme, in our last newsletter we featured an article "*Unseen Threats: Lumens 2.0 Reveals the Hidden Challenges of Cleaning Lumened Instruments*". The same authors have presented this paper at the 2025 Healthcare Sterile Processing Association Annual Conference. It presents the findings from their recent study which highlighted how unrealistic IFU's for orthopaedic and neurosurgical instruments routinely overlook real-world limitations, resulting in inconsistent cleaning, confusion among staff and serious risks to patients. They found contradictory instructions and unrealistic cleaning expectations.

The study confirms what has long been suspected, adherence to IFUs is no guarantee of internal cleanliness, even after cleaning protocols were followed exactly as outlined in the IFU. The researcher's message is urgent. Manufacturers must work with infection prevention personnel and sterile processing partners to make real-world testing of device cleanability an integral part of the design and regulatory process of reprocessing instruments. Vague or contradictory IFUs, or those that require impractical tools or techniques are unsafe as well as inconvenient.

Read examples of the unrealistic and contradictory IFU's HERE

ITEMS OF INTEREST

Religious influences on infection prevention and control practices in healthcare settings: A scoping review.

Whilst evidence-based infection prevention and control (IPC) interventions are widely implemented across different healthcare settings, their implementation may be influenced by religious factors. This scoping review examined thirteen articles to assess the influence that religious factors have on IPC practices amongst healthcare workers (HCWs).

Thirteen articles were reviewed, and came from the United Arab Emirates (3), Iran (2), Libya (1), Lebanon (1), the United Kingdom (2), Switzerland (1), Brazil (1), Uganda (1) and Zambia (1). Three main themes were identified: religious rituals and influence, use of alcohol, and bare-below-the-elbows principle.

Religious rituals and influence: handwashing is identified as an established ritual practice in many religions, and may be an enabler of hand hygiene compliance and work to promote and reinforce hand hygiene. The wearing of PPE such as masks, was found to be something that was enabled by the frequent use of face and head coverings, particularly in the Muslim HCW population.

Use of alcohol: Buddhism, Hinduism and Islamism all prohibit the use of recreational alcohol, but allow it's use in medical situations. However some HCW who practice these faiths may not be comfortable with using ABHR. This can potentially be a barrier to hand hygiene compliance.

"Bare Below the Elbows (BBE)": This principle may conflict with Islamic dress codes where covering the arms and dressing modestly is required, and may be a barrier to BBE compliance.

The finding of this review identified that religious factors can be both enablers and barriers to IPC practices and have direct implications for healthcare practices and policies. More inclusive policies and culturally sensitive educational programs that address the specific concerns of different faith communities and respect religious and cultural beliefs whilst still promoting effective IPC measures is required. These measures will contribute to better healthcare outcomes and a more inclusive healthcare environment.

Read the full article HERE

What's the Point of Quality and Safety Auditing in Healthcare if Nurses Don't Use Data to Drive Improvement?

Clinical audits are vital tools for improving quality and safety. They are designed to identify care gaps, inform practice improvement, and ensure accountability. Yet, in practice, the utility of audits are often limited by poor feedback mechanisms, redundancy and workforce disengagement. Nurses, in particular, frequently report audit fatigue and frustration when the same data are reviewed repeatedly without visible change. This disconnect between data collection and clinical improvement raises an important question: *Are we auditing for improvement, or auditing for auditing's sake?*

Undertaking clinical audits have been a hallmark of quality under the healthcare accreditation standards for the Australian Commission for Quality and Safety in Healthcare. The National safety and Quality Health Service (NSQHS) Standards aim to improve the quality of care for patients in healthcare settings. Most healthcare services have developed schedules and reporting systems to routinise clinical audit timelines and the documentation forms part of the facility's accreditation.

Audit topics should focus on high-risk, high-volume, high-cost care activities, or where there are levels of clinical variation. Audit and feedback can help improve professional practice and system performance, however health services often fail at the "feedback" stage.

Significant barriers to the effective use of audit data exists, including lack of awareness or understanding of the importance or audits, misinterpretation of data, a lack of incentivisation, time, skills or motivation to use data, or system-related issues such as inaccurate data, poor data infrastructure, or systemic reporting of data into quality committees that are beyond unit level.

The overuse of audits can contribute to activities perceived as consuming time and resources without delivering clear benefits to patient safety or clinical outcomes, and quality improvement activities to address clinical issues often default to the "education will fix it" option and plug the gaps with ad-hoc or inservice education (56% of response interventions in a recent Cochrane study), without necessarily addressing the issues.

Auditing is key in identifying risks and informing safer clinical practice, however nursing time is finite and there is a need for greater strategic thought on clinical auditing to reduce over auditing whilst failing to engage and act on data.

Read the full article HERE

4 Evidence-Based Answers to Common Surgical Attire Questions

Surgical attire plays a critical role in infection prevention and patient safety. They are an essential component of maintaining a clean and hygienic perioperative environment. By limiting the release of microorganisms from the skin and hair of perioperative team members, it contributes to reducing the risk of surgical site infections.

The evidence around perioperative attire best practice is evolving, and there is a gap between awareness and agreement on best practice. Being familiar with the evidence behind attire practices helps reinforce current standards, and empowers nurses to educate others and guide conversations

that might otherwise rely on opinion or outdated habits. Knowledge also help support compliance. AORN answered 4 recent questions:

1. Why do bald people have to wear head coverings?

***Answer*:** The epidermis renews itself approximately every 28 to 40 days, meaning skin cells are constantly being shed and replaced. The wearing of a head cover is intended to contain hair, skin and microorganisms that can be shed by perioperative team members and prevent contamination of the sterile field.

2. Do scrub jackets need to be worn during the pre-op patient skin antisepsis?

Answer: Arms may be covered during performance of preoperative patient skin antisepsis. Although the benefits of wearing long sleeves during performance of preoperative patient skin antisepsis are likely to exceed the harms, further research is needed to confirm the risk-benefit assessment and the effect on surgical site infection rates.

3. Can you wear a skirt in the OR?

Answer: There is no recommendation on skirts because there is a gap in the research related to this topic. But AORN recommends that the interdisciplinary team determine policies and procedures related to scrub skirts, including which areas they may be worn in and whether leggings are required. The policy should also address whether the facility provides and launders the skirts. And leaders should keep in mind cultural and religious practices related to alternative surgical attire and make reasonable accommodations to support an inclusive environment.

4. What is the order of putting on and taking off PPE in sterile processing?

Answer: With gloved hands, grasp the front of the gown below the neckline.

1. Pull the gown away from the body so that the attachments break.
2. While removing the gown, roll the gown inside out into a bundle, touching only the outside of the gown with gloved hands.
3. Peel off the gloves as the gown is being removed, touching only the inside of the gloves and gown with bare hands.
4. Discard the gown and gloves into a waste container or soiled linen bin and perform hand hygiene.

Read the full article HERE

To drink or not to drink, that is the question

Australia has seen a rapid increase in the number of hospitals reviewing their pre-operative fasting times, however, many still adhere to traditional fasting protocols. In many cases, even when updated guidelines are implemented, fasting times are often extended in clinical practice. This discussion paper highlights the need for greater understanding of how longer fasting times contributes to adverse symptoms and outcomes, including thirst, dehydration, dry mouth, post-operative nausea and vomiting, haemodynamic instability and prolonged hospital stays.

Due to the many variables in patient's conditions and pharmacological treatments, it is no longer appropriate to have a "one size fits all" traditional approach to pre-operative fasting. All nurses involved in pre-operative care including day of surgery admissions, day surgery and surgical wards need to understand the concepts and theoretical background behind traditional and more liberal fasting protocols so they can provide informed, safe care and more comfortable perioperative outcomes by following the ANZCA guidelines.

Nurses and anaesthetists must work together to ensure that updated fasting instructions are successfully implemented into routine clinical practice, but also that "at-risk" patients are identified, e.g. people taking GLP-1 receptor agonists for weight loss and diabetes management which are known to cause delayed gastric emptying.

Traditional prolonged fasting has become an outdated practice, with no benefit to the reduction of anaesthetic-based risks.

Read the full article HERE

FEATURE ARTICLE

Safe Injection, Infusion, Medication vial, and Point-of-care Testing Practices in Health Care

This Association for Professionals in Infection Control and Epidemiology (APIC) position paper provides updated evidence-based guidance on safe injection, infusion, vials and point-of-care testing, and addresses the infection risks associated with these practices.

From 2004 to 2014, 35 outbreaks of viral hepatitis were reported, exposing over 100 000 individuals and transmitting hepatitis B or hepatitis C to more than 350 patients. A review of current literature published since 2015 found an additional 22 published outbreaks associated with unsafe injection, infusion, point-of-care, or medication vial practices in the Unites States. Infections included bacteraemia, viremia, or septic arthritis in over 200 patients. Most outbreaks occurred in outpatient ambulatory settings (colonoscopy clinics, day surgeries, and diagnostic imaging centres).

Some of the issues highlighted by this study were:

- Medication preparation outside a pharmacy without adequate environmental controls;

- Medication preparation near sinks;
- Inappropriate storage on intravenous (IV) solutions;
- Improper labelling and storage of drawn-up saline flushes, and the indefinite storage of these flushes in plastic drawers;
- Drawing up multiple doses for different patients from a single bulk dose pharmacy vial without the correct environmental controls for compounding sterile preparations, including not scrubbing the diaphragm with sterile alcohol prior to each entry;
- Storing syringes and needles outside their original packaging;
- Lack of disinfection of IV hub/port prior to using for IV administration;
- Single dose vials used as multidose vials;
- Lack of hand hygiene products available in the medication preparation room; and
- Reuse of blood glucose monitors between patients without disinfection.

Drug diversion is a potential threat in any health care service and injectable controlled substances/opioids stolen by HCW with substance use problems are continuing to cause contamination of medications and potential transmission of blood borne viruses to patients, with events and outbreaks continuing in recent years.

Use of safety engineered devices, and safe handling and disposal of sharps practices and education has been effective in reducing the incidence of sharps injuries.

Based on the review of updated evidence and guidance, APIC has provided a robust set of recommendation to support safe injection, infusion, medication vials and point-of-care testing practices in healthcare settings. Highlights of these recommendations are outlined below.

APIC recommends utilizing aseptic technique for medication preparation outside of a pharmacy:

- DO—Store and prepare medications and supplies in a clean area, on a clean surface, away from sinks or other water sources.
- DO—Perform hand hygiene before and after accessing supplies, handling vials and IV solutions, and preparing medications.
- DO—Use aseptic technique in all steps of medication preparation and administration (ie, medication vial use, including vaccine preparation, reconstituting powder medication vials in a medication area due to instability if premixed, parenteral medication administration, injections, and IV contrast preparation).
- DO—Disinfect IV hubs/ports and vial diaphragms (septum) with sterile 70% alcohol using friction for 15 seconds, and allow to dry prior to each entry, which includes after removing the cap of the vial, as the cap is considered only a dust cover.
- DO—Discard all opened vials, IV solutions, syringes, and unused prepared medications involved in an emergency.
- DO—Avoid contacting sterile drugs and sterile areas of devices and containers with nonsterile objects, secretions, or particles shed from personnel.
- DO—Wear a surgical mask or avoiding talking when preparing injectable medications for administration to joints or sterile spaces.

Aseptic technique refers to properly handling, preparing, and storing medications and injection equipment or supplies to prevent microbial contamination. It is imperative that the HCW who

prepares, administers, and stores the medication is knowledgeable and educated on the aseptic technique.

IV solutions and infusion tubing/administration sets:

- DO—Immediate use of IV solutions (for emergencies) needs to be administered (connected to the patient) within 4 hours.
- DO—Keep manufactured IV solution bags in their original packaging until use to prevent contamination or unknown admixtures.
- DO—Prepare IV solutions as close to administration as feasible to prevent contamination.
- DO—Discard unused IV solutions immediately after patient use to avoid use on another patient or drug diversion.
- DON'T use IV solution containers (ie, bags, bottles, and vials) to obtain flushes or for any other purpose for more than 1 patient. Do not use spiking devices to remove fluid from IV bottles/bags for multiple uses or patients, even if they have a 1-way valve.
- DON'T use infusion supplies, such as needles, syringes, flush solutions, administration sets, large glass vials (ie, albumin), or IV solutions on more than 1 patient.

IV flushing and infusion practices:

- DO—Use single-use containers/syringes for flush solutions whenever possible.
- DO—Disinfect the IV hub/port or needleless connector with sterile 70% alcohol using friction for 15 seconds, and allow it to dry prior to each entry.
- DO—After removing alcohol-impregnated caps, disinfect them with sterile 70% alcohol using friction and allow them to dry prior to each entry. Disinfecting with friction cannot be accomplished by the alcohol-impregnated cap. Disinfecting the IV hub/port or needleless connector with friction with each entry prevents potential contamination or unseen particles from the alcohol-impregnated cap.

Medication Vials:

- DO—Ensure the medication vial is an approved product by the TGA, including cosmetic injectables/products.
- DO—Always follow the manufacturer's IFU and storage instructions.
- DO—Use single-dose vials whenever possible.
- DO—Always use a new sterile syringe and needle/cannula with entering a vial.
- DO—Disinfect the diaphragms (septum) of vials with sterile 70% alcohol using friction for 15 seconds and allow them to dry prior to each entry. This includes after removing the cap of the vial, as the cap is considered a dust cover.
- DO—Inspect vials and discard them if sterility is unknown or suspected to be compromised. Examine vials for any particulate matter, discoloration, or turbidity.
- DO—Discard single-dose vials after use. Never use them again on the same patient or another patient.
- DO—Discard any vial that has been placed on a contaminated surface or on a used procedure tray.
- DO—Discard any vial that has been used during an emergency procedure.
- DO—Use multidose vials for a single patient whenever possible, and access vials using a new sterile needle/syringe and aseptic technique each time.

- DON’T store multidose vials in the patient care environment (eg, at bedside, operating room, or procedure room).
- DON’T transport or store vials in HCW personal clothing or pockets.
- DON’T combine/pool leftover contents of vials for later use.
- DON’T leave a needle, cannula, or spike device (even if it has a 1-way valve) inserted into a vial diagram because it increases the risk of contamination.

Medication ampules:

- DO—Always follow the manufacturer’s IFU and storage instructions.
- DO—Disinfect the ampule with sterile 70% alcohol using friction for 15 seconds and allow it to dry prior to breaking the top off.
- DO—Use an ampule breaker, if available, to open ampules.
- DO—Use a sterile gauze or sterile 70% alcohol pad around the ampules’ neck to protect oneself from injury in case of glass splinters when breaking open the ampule.
- DO—Always use a new needle/straw and a new syringe to withdraw the medication.
- DO—Avoid touching the outside of the ampule with the needle or straw.
- DO—Discard open ampules immediately.

Personal protective equipment:

- DO—Use personal protective equipment in accordance with standard precautions if contact or exposure to body fluids is possible when administering medications.
- DO—Wear a surgical mask when placing an epidural/spinal/lumbar catheter, injecting into an epidural/spinal space (ie, contrast for imaging), and intrathecal chemotherapy.

Point-of-care devices (e.g. blood glucose monitoring devices):

- DO—When performing a point-of-care test requiring blood samples, read and maintain the manufacturer’s IFU prior to using device(s) and supplies to ensure the safety of the patient and HCW.
- DO—Ensure both training and competency on the available device(s) and supplies are documented at the time of employment, at least annually, and as needed (ie, required if manufacturer’s IFU has changed, data collection indicates additional training).
- DO—Whenever possible, blood glucose meters should be assigned to an individual patient and not shared. When multiple patient use is unavoidable, check the manufacturer’s IFU to ensure that the system/device is indicated to be used for multiple patients in a health care setting by HCW.
- DO—Follow the manufacturer’s IFU related to cleaning and disinfecting the device after each patient’s use.
- If the manufacturer’s IFU does not provide instructions for cleaning and disinfection, then the device should not be used for more than 1 patient.

For devices brought from a patient’s home:

- DO—Follow the health care organization's policies and SOPs related to patients bringing their own devices from home.

- DON’T allow the use of a home device if a health care organization cannot ensure that HCWs are properly trained on a patient’s home device.

Health care professionals/workers (HCWs):

- DO—Recommend immunization of HCWs for vaccine-preventable diseases such as HBV according to the CDC’s Advisory Committee on Immunization Practices.
- DO—Ensure that a bloodborne pathogen exposure control plan is in place, i.e. Occupational Exposure Management policy and procedure.
- DO—Train and assess the competency of all HCWs using needles/syringes for injection and disposal safety (ie, nurses, physicians, anaesthetists, radiology technologists, and pharmacists).
- DO—Infection prevention and control should include safe injection and needle safety in their annual risk assessment for their health care setting.
- DO—Based on a risk assessment of safe injection and needle safety, a health care organization could perform periodic observations or audits to ensure competency and education.
- DO—Include infection preventionists in all drug diversion investigations to assess risk to patients and HCWs and to develop prevention strategies with a multidisciplinary team.
- DO—Test HCWs suspected of drug diversion of injectable medications for bloodborne pathogens, including HCV, HBV, and HIV.
- DO—Educate HCW about substance abuse, drug diversion, and risk to patient safety.

Oversight, measurement, and enforcement:

- DO—Develop a facility policy and SOP that includes methods for safe injection practices.
- DO—Ensure professional practice standards/delegation of safe injection/infusion practices are included in an HCW's scope of practice.
- DO—Have an active surveillance program in place to detect health care-associated infections.
- DO—Analyze surveillance data and provide feedback to stakeholders, with the awareness that injection safety breaches can result in single- or multipathogen clusters.
- DO—Develop appropriate infection prevention and control education and training on safe injection, infusion, point of care, and medication preparation for all roles (eg, anaesthetists, nursing, physicians, and radiology technologist).
- DO—Measure the competency of HCWs in preparing injections and infusions through regular audits using a standardized tool, such as one available from the CDC, and provide feedback.

This review provides infection preventionists, HCWs, and health care leaders with evidence-based information to support the development of policies, guidelines, and measurement tools to evaluate compliance and the impact of safe injection, infusion, medication vials, and point-of-care practices.

Read the full article HERE

IN FOCUS

Endoscope-associated outbreak of OXA-181-carbapenemase-producing *Klebsiella pneumoniae* and its implications for hygiene management

An outbreak of OXA-181 carbapenemase-producing *Klebsiella pneumoniae* was detected in a tertiary care hospital in a Germany. Between July and October 2022, the outbreak was detected in 19 patients, 84% (16) of whom had a history of GI endoscopy during their stay in the hospital. GI endoscopy was suspected as possible route of transmission, prompting an audit of reprocessing procedures and a systematic inspection of reprocessed endoscopes, where no abnormalities were detected. In August 2022, the outbreak strain was isolated from a reprocessed ready-to-use colonoscope. In September 2022, all GI endoscopes older than 10 years were replaced with new instruments. In October 2022, the outbreak strain was (again) isolated from a new endoscope that had been reprocessed in accordance with the IFU in an automated endoscope washer-disinfector (AEWD). Further audits and additional process controls were initiated, which revealed residual moisture in the endoscope channels several days after reprocessing. An additional drying stage was implemented. In the following 6 months a further 13 patients were identified with confirmed infection or colonisation with the outbreak strain, primarily due to extensive hospital-wide screening. Only 3 of the 13 had undergone endoscopic examination, suggesting patient to patient transmission. The outbreak ended in March 2023 after implementing further training, audits, intensive cleaning and strict single room isolation with dedicated staff.

In total, 32 patients were assigned to the outbreak, of whom 13 suffered an infection (sepsis, urinary tract infection, pneumonia, wound infection) and 19 were colonized. Six patients died, including three cases in which the infection with *K. pneumoniae* outbreak strain was reported as the most likely cause of death.

In response to the outbreak, the entire endoscope reprocessing was repeatedly audited. Initial audits found no irregularities, confirming full compliance with national guidelines and IFU, as well as a comprehensively validated reprocessing procedure. However, further on-site inspections and intensive examination of individual reprocessing steps revealed a deviation, namely residual moisture in endoscope channels. Overall, several factors favouring biofilm formation in endoscope channels were identified, in particular the advanced age of endoscopes, rough surfaces and persistent moisture in endoscope channels despite drying in the AEWD and storage in a drying cabinet according to IFU. Ongoing testing and evaluation led the researchers to hypothesize that biofilm formation was a key factor contributing to this outbreak.

This paper highlights the potential of endoscopes, beyond duodenoscopes, as vehicles for nosocomial transmission of pathogens, e.g., multi-drug-resistant organisms such as carbapenemase-producing *K. pneumoniae*. It also calls for increased attention to the problem of biofilm formation in endoscope channels in conjunction with the increased tolerance of biofilm-embedded pathogens to disinfection measures that are routinely used for reprocessing but whose efficacy has only been tested against planktonic cells.

Read the full article HERE

Resources for Sterilisation Refresher Training

The World Federation for Hospital Sterilisation Sciences provides a resource for sterilisation training in its WFHSS - E-Learning modules. These modules are free, and cover the basic concepts relating to medical device reprocessing. They are aimed at people who are working this area.

The Clinical Excellence Commission provides Reprocessing of Reusable Medical Devices Reprocessing Competencies that address the requirements of AS 5369:2023 and can be delivered by any qualified trainer/assessor.

Surgery and Sustainability: time for a multidisciplinary collaboration to reduce the carbon footprint while not compromising infection prevention.

In an open letter to the editor of The Journal of Hospital Infection, members of the Department of Clinical Microbiology and Department of Surgery at the Ireland University of Medicine and Health Sciences, and Department of Surgery Beaumont Hospital Dublin, are calling on healthcare services to reduce their carbon footprint by decreasing unnecessary consumption and economising on power generation in surgery.

Guidelines to prevent surgical site infection (SSI) categorize measures into pre-, peri- and postoperative interventions. Rituals and behaviours in the operating theatre refer to action, regularly or usually followed, and include both how we conduct ourselves and how we respond. Many are embedded in operating theatre practice to prevent infection, even if supported by little evidence. Many of these rituals are considered to promote professionalism and discipline in the operating theatre. However, some are possibly wasteful and contribute to the carbon footprint.

The authors are calling for well-conducted pragmatic clinical trials that could offer evidence to support safe and sustainable modifications to current practices. Infection prevention and control practitioners, and others, should collaborate as a matter of urgency with surgeons in devising such trials, and in seeking funding from national and other research bodies. Such studies might support dispensing with some rituals and behaviours, and the re-use of some equipment/materials, while not compromising infection prevention. Furthermore, the results could potentially reduce both healthcare costs and carbon emissions.

Read the full letter HERE

WHAT'S NEW

Australian Commission on Safety and Quality in Health Care

Strategic Plan 2025 - 2030

Australian Commission on Safety and Quality in Healthcare Strategic Plan 2025 – 2030

The Australian Commission on Safety and Quality in Healthcare has released it's Strategic Plan 2025 – 2030 with 4 strategic priorities:

- **High-quality care** in an evolving environment, including the impact of artificial intelligence, new models of care and climate change.
- **Strong outcome-focussed clinical governance**, increasingly shaped by data and evidence about outcomes.
- **Empowered patients, carers and communities** at every level of healthcare design and delivery.
- **An improvement-driven workforce culture** which makes better healthcare everyone's responsibilities and fosters accountability, continuous learning, cultural safety and a readiness to improve.

Read the Strategic Plan HERE

Transforming endoscope reprocessing: a new model

A first of its kind service launched in Australia in 2024 to provide pre-sterilised, microbiologically tested, ready to use, loan endoscopes on demand. AS 5369:2023 mandates microbiological testing of loan endoscopes within 72 hours of receipt. Single use endoscopes eliminate reprocessing concerns but contribute a significant financial and environmental burden. This article examines the

challenges of current endoscope reprocessing methods, the operational benefits of on-demand sterile endoscope services, and how this model supports infection prevention, regulatory compliance and sustainability.

Benefit	Impact
Immediate Access	Ensures hospitals can supplement fleets or replace faulty equipment without delays.
Regulatory Compliance	Provides pre-sterilised, microbiologically tested endoscopes, eliminating the need for microbiological testing until the scheduled interval for the endoscope type.
Operational Efficiency	Frees staff from urgent reprocessing of the loan endoscope, allowing immediate use upon receipt of the endoscope.
Extended Storage	Endoscopes can be stored for up to 18 months, ensuring a backup supply is always available.
Environmental Impact	Hospitals reduce water, chemical, and energy usage associated with the reprocessing of loan endoscopes on delivery.

By offering a flexible, scalable solution, the On-Demand service enables hospitals to supplement existing endoscope fleets, or secure a reliable backup during equipment downtime. In addition to enhancing workflow efficiency and compliance, the On-Demand service supports sustainability through its centralised, advanced sterilisation process. Utilising a high-efficiency ethylene oxide (EtO) sterilisation system, the service minimises emissions, while maintaining high safety and regulatory standards.

When a hospital requests a loan endoscope to supplement its fleet or replace a malfunctioning device, the endoscope arrives ready for immediate use. After use, the endoscope is returned to the central facility, where it undergoes validated sterilisation before being redeployed.

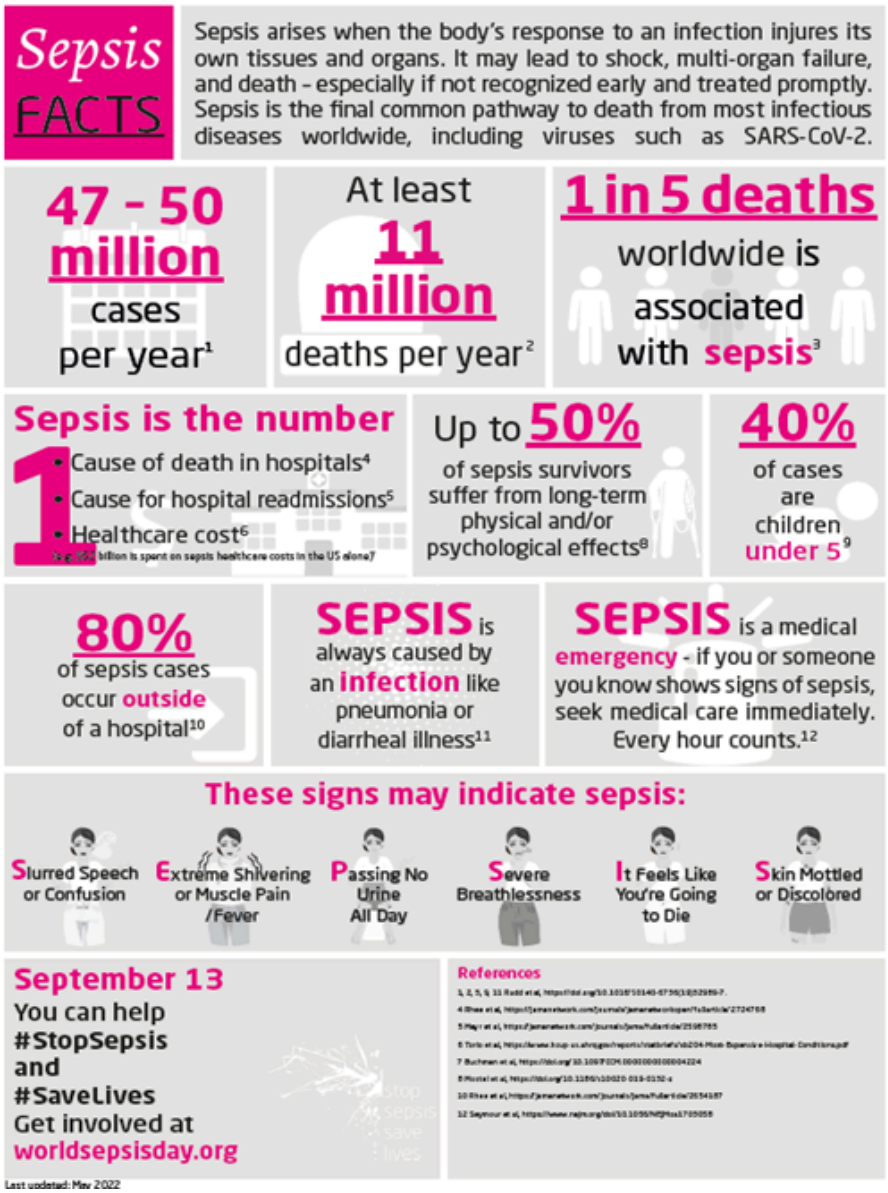
This model also provides the option for hospitals to use the On-Demand fleet as a replacement for costly capital works required for the provision of reprocessing facilities on site and the significant cost of the purchase of a fleet of endoscopes. The use of the On-Demand service will also provide significant benefit for replacing low use or specialised endoscopes, allowing sites to obtain the specific equipment when it is required and avoiding having such instruments needing to be purchased into their own fleet.

By eliminating reprocessing and microbiological testing of loan endoscopes, ensuring equipment availability, and improving sustainability, this model helps hospitals maintain high infection control standards, while reducing operational burdens.

Read the full article HERE

UPCOMING EVENTS

World Sepsis Day September 13th



Reference: worldsepsisday.org

Get ready for World Sepsis Day 2025 on 13 September. The website has toolkits, posters, infographics, banners, quizzes and an event inspiration guide free to download. Use these resources to plan a fun, educational activity for your staff.

Ageing Australia National Conference 2025

International Infection Prevention Week – October 19 to 25

IPC Week is held in the third week of October each year. This year it will be celebrated from 19 – 25 October with the theme “IPC Champions: Leading the Way to a Safer Healthcare”.

We will have more information and IPC resources coming soon!

2025 National Antimicrobial Prescribing Survey (NAPS) Auditing Periods

The NAPS rebuild project is progressing and the aim is to launch the new NAPS platform mid-year. The audit periods for 2025 are scheduled as in above picture.

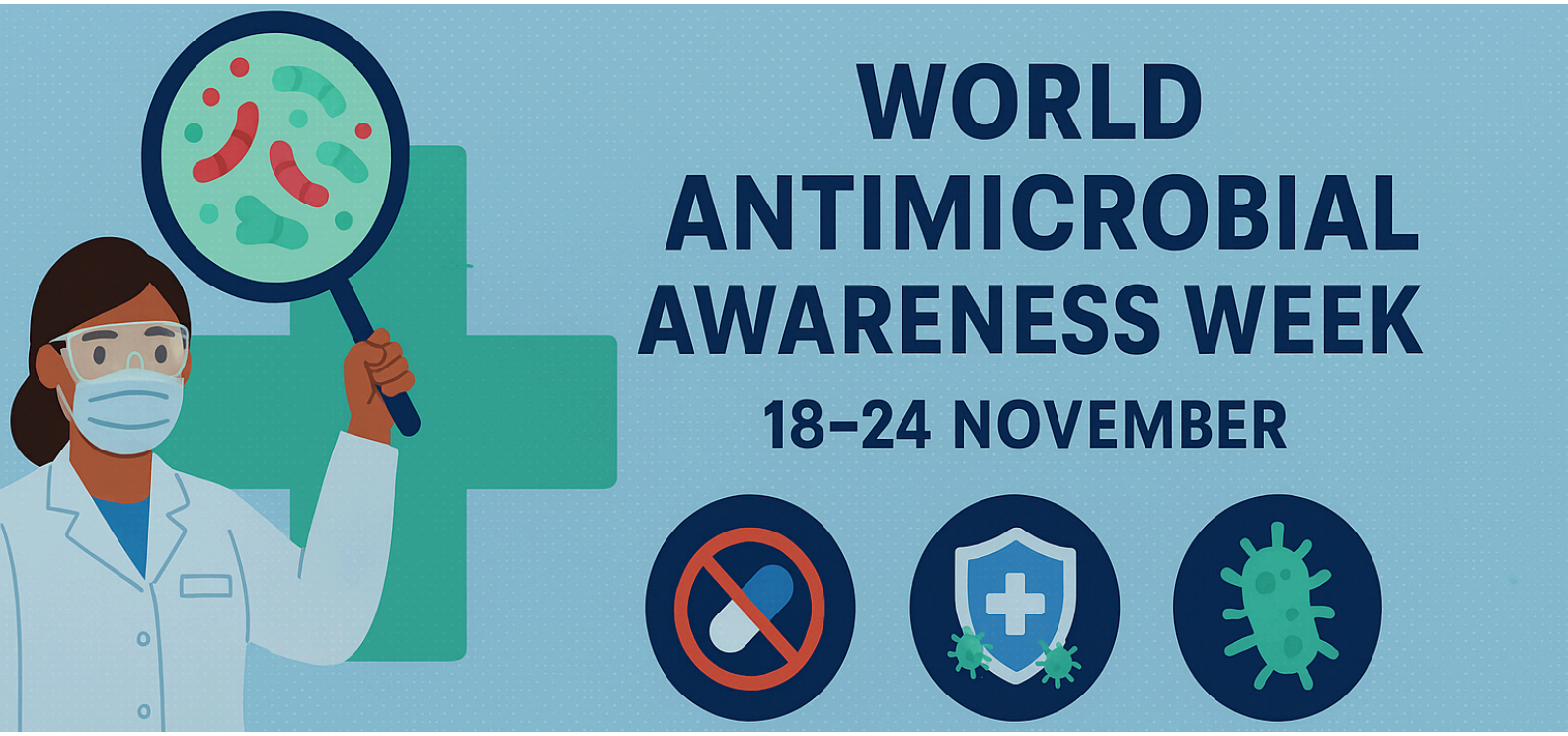
Module	2025 Auditing Periods
HOSPITAL NAPS National Antimicrobial Prescribing Survey	January 14th to December 31st
SURGICAL NAPS National Antimicrobial Prescribing Survey	January 14th to December 31st
AGED CARE NAPS National Antimicrobial Prescribing Survey	June 1st to December 31st
ANTIFUNGAL NAPS National Antimicrobial Prescribing Survey	National Benchmarking methodology TBC June 1st to December 31st

ACIPC International Conference 16-19 November 2025

Important Dates:

- **Registration Open**: Now open - Click here to register
- **Early Registration Discount Closes:** 1st October 2025

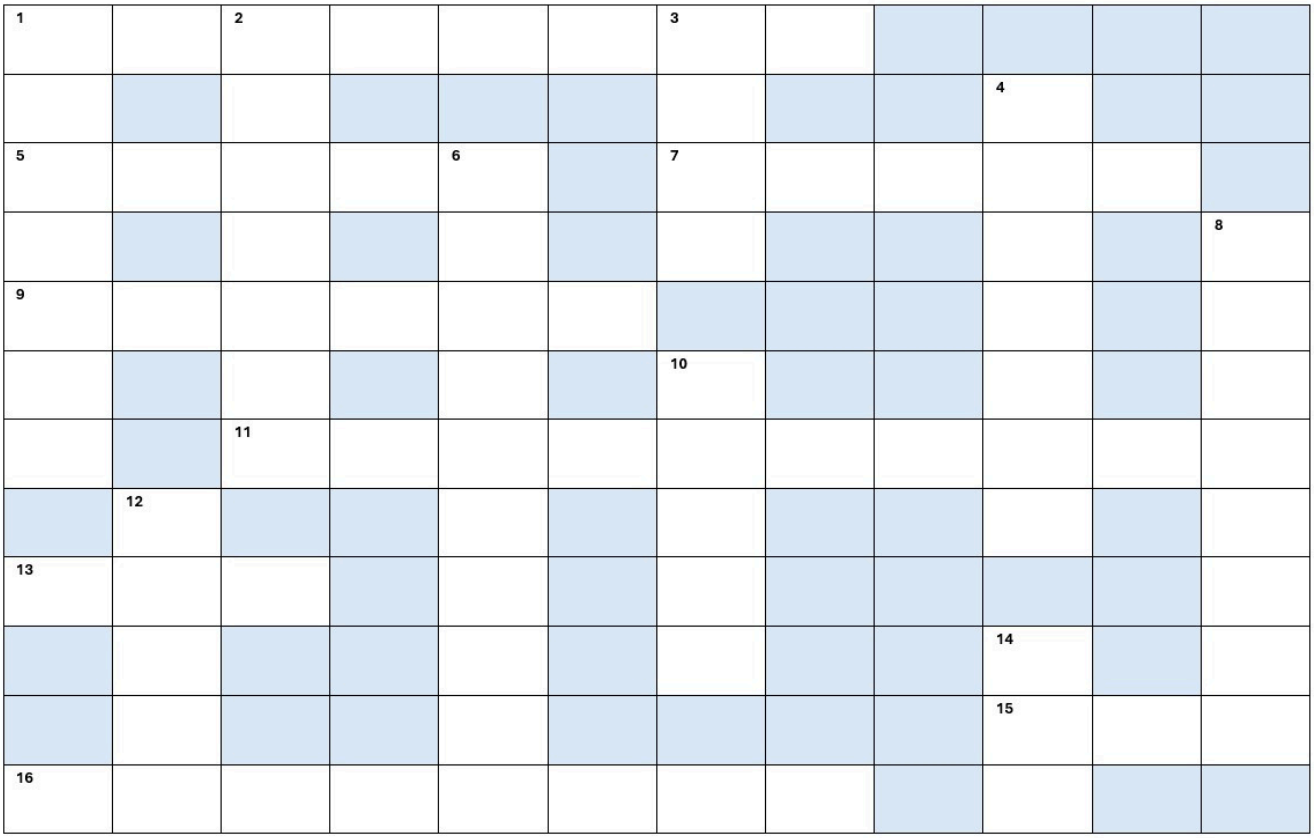
World AMR Awareness Week- 18 to 24 November



World AMR Awareness Week (WAAW) is a global campaign that is celebrated annually to improve awareness and understanding of AMR and encourage best practices among the public, One Health stakeholders and policymakers, who all play a critical role in reducing the further emergence and spread of AMR.

Find out more HERE

Following the theme of World Sepsis Day, have a try at the Aseptic Technique Crossword below. Answers will be given in the next newsletter.



CLUES

ACROSS	DOWN
1. Type of AT used for simple, quick procedures.	2. Free from contamination with microorganisms.
5. An AT occurrence.	3. Framework that aseptic practice is based on.
7. Time frame for standard AT.	4. All clinicians should be _____ in AT
9. Packaging not damaged or compromised.	6. Way of performing AT.
11. Same practices applied.	8. Only sterile items may come into contact with this type of aseptic field.
13. Personal Protective Equipment (abbreviation).	10. A designated aseptic working area.
15. Everything.	12. A component of PPE.
16. AT is always required for these types of procedures.	14. Healthcare Associated Infection (abbreviation)

CONTACT

For feedback, partnerships, or further information, please feel free to contact us at info@handsoninfectioncontrol.com.au

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