Application of aseptic technique in wound dressing procedure

A consensus document
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Disclaimer
This document was developed by Wounds Australia. It presents minimum standards for a wound dressing procedure in the inpatient, clinic, outpatient, general practice, residential aged care and home care environments within the Australian health care context. In preparing the document Wounds Australia sourced relevant documents and regulatory guidelines and is based on information available at the date of compilation. The recommendations in this document are a general guide to appropriate clinical practice, to be implemented by qualified health care professionals subject to their clinical judgment of each individual case and in consideration of the patient’s personal preferences, organisational policy and procedures and available resources. The guide should be implemented in a culturally aware and respectful manner in accordance with the principles of protection, participation and partnership.

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Contents

Introduction .......................................................................................................................2
Scope of this document .................................................................................................2
Risk assessments and infection prevention strategies in clinical practice ..................................................3
Infection prevention strategies .......................................................................................3
Recommendations for the application of aseptic technique in wound dressing procedure ..............................................................4

1 Cleaning considerations required when performing a wound dressing procedure ............................................................5

2 Wound cleansing considerations .............................................................................7

3 Environmental considerations required when performing a wound dressing procedure ..........................................................10

4 Storage considerations required when performing a wound dressing procedure ...............................................................12

5 Considerations required prior to using ‘open-but-unused’ wound dressing products ...............................................................14

6 Patient considerations in determining appropriateness to use open-but-unused wound dressings .............................................16

7 Managing open-but-unused wound dressings aseptically .............................17

References ....................................................................................................................20

Contributors ..................................................................................................................21

Glossary of Terms ........................................................................................................22
Introduction

This document has been developed by Wounds Australia to support healthcare professionals (HCPs) in the application of aseptic technique in wound dressing procedure. It is based on the *Australian Guidelines for the Prevention and Control of Infection in Healthcare* and, Standard 3 - ‘Preventing and Controlling Healthcare Associated Infections’ within the *National Safety and Quality Health Service Standards*.1, 2

The use of aseptic technique minimises the introduction of pathogenic organisms to a wound that might lead to infection. Further, the adoption of Aseptic Non-Touch Technique (ANTT®) as a framework for aseptic practice in the United Kingdom (UK) has reduced the rate of healthcare-associated infection.3 Contemporary aseptic technique is founded on core infection control principles which involve some changes to practice and new terminology. The type of aseptic technique is selected according to the complexity of the procedure, patient risk factors and environmental considerations.

Of particular note, ‘sterile technique’ and ‘clean technique’ are no longer supported, and aseptic procedures are described and performed according to the principles of surgical or standard aseptic technique.

A glossary has been included at the end of the document; and the information provided in the statements and dot points are not repeated in the accompanying tables for the various site settings.

Scope of this document

This consensus document has been developed to assist clinicians in the application of aseptic technique when performing a wound dressing procedure in a range of settings. It can be used by clinicians and service providers to guide wound dressing practice, policy and procedure.

The core components of infection prevention—which include hand hygiene, glove use, aseptic fields, non-touch technique, environmental controls and sequencing—are already well described in the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.4 It is expected that all clinicians will have prior understanding of the core components of infection prevention and application of both standard and surgical aseptic technique. This consensus document outlines key considerations for cleaning and environmental aspects, wound cleansing, storage of wound products, and the use and management of open-but-unused dressing products.

The recommendations in this document have been developed as consensus statements by a diverse group of healthcare professionals, from across Australia, who represent the hospital and community sectors, general practice, residential care, rural and remote regions, and infection prevention and control. A systematic review was undertaken of contemporary evidence (2000-2015) and supporting evidence is outlined where applicable. Where there was a lack of evidence to support or refute a recommendation, expert consensus was provided. The recommendations in this
document are a general guide to appropriate clinical practice, to be implemented by qualified health care professionals, subject to their clinical judgment of each individual case, and in consideration of the patient’s personal preferences, organisational policy and procedures and available resources. This document informs, but does not replace local organisational policy and procedure.

**Risk assessments and infection prevention strategies in clinical practice**

The following actions are required for safe aseptic practice:

- assess the risk—select standard or surgical aseptic technique according to the technical difficulty of the procedure, wound complexity and patient and environmental characteristics
- manage the environment—avoid or remove actual or potential contamination risks
- decontaminate and protect—perform hand hygiene, wear Personal Protective Equipment (PPE), clean and disinfect
- use selected aseptic fields—use general, critical and micro-critical fields to protect key parts and key sites
- perform the procedure in a logical sequence
- use non-touch technique—only key parts come into contact with other key parts or key sites
- prevent cross infection—use standard precautions including hand hygiene, store or dispose of equipment appropriately, use single use items when necessary and practice safe waste disposal.

**Infection prevention strategies**

There are six components for infection prevention applicable to a wound dressing procedure:

- identify and protect key parts and sites
- hand hygiene
- glove use and other PPE
- aseptic field use and non-touch technique
- environmental controls
- logical sequencing of the procedure
Recommendations for the application of aseptic technique in wound dressing procedure

The application of any of the following recommendations is based on the outcome of a risk assessment for each patient that is founded on the actions for safe aseptic practice and consideration of the:

- patient’s health related risk factors \(^{5-7}\)
- wound characteristics \(^{5-8}\)
- availability of products and facilities for wound dressing equipment storage \(^{8}\)
- complexity of procedure \(^{8,9}\)
- environmental factors, including the care setting in which the procedure is performed
- service provider policies and procedures.

Recommendations are outlined in the following sections:

1. Cleaning considerations required when performing a wound dressing procedure
2. Wound cleansing considerations
3. Environmental considerations required when performing a wound dressing procedure
4. Storage considerations required when performing a wound dressing procedure
5. Considerations required prior to using open-but-unused wound dressing products
6. Patient considerations in determining whether to use open-but-unused wound dressings
7. Managing open-but-unused dressings aseptically.
1.1 Cleaning the work area

Clean the surface/s to be used for the dressing equipment before and after the procedure.

1.2 Managing equipment for the wound dressing procedure

1.2.1 General equipment

When equipment has come into contact with the wound, tissue, blood or bodily fluids, take the following action:

- **single use equipment**—discard after use
- **multiple use equipment**—any instrument or piece of equipment that is to be reused must be registered and used for its intended purpose and cleaning, disinfection and/or sterilisation is performed as per the manufacturer’s instructions. The minimum level of reprocessing required for reusable instruments and equipment depends on the individual situation (i.e. the body site and the nature by which the instrument will be used). If appropriate reprocessing cannot be achieved or the equipment is not registered for reprocessing/reuse, (i.e. is for single use) it must be discarded at completion of the procedure.

1.2.2 Stainless steel scissors

When using stainless steel scissors that have **not** come into contact with the wound, tissue, blood or bodily fluids to cut open-but-unused dressing products:

- ensure the scissors are used for the sole purpose of cutting open-but-unused dressings
- conduct a risk assessment of the patient, the wound, the environment and the procedural complexity when considering whether to reuse the scissors to cut more open-but-unused dressing products
- manage the scissors to promote asepsis by storing and labelling them appropriately and ensuring they are **patient specific**.

Prior to using the patient specific dressing scissors:

- inspect the scissors for cleanliness and integrity
- wipe the scissors with an alcohol or detergent wipe from the back of the blades to avoid injury to the HCP.
After using the patient specific dressing scissors:
• wash the scissors in warm, soapy, potable tap water or cleanse it with an alcohol or detergent wipe\(^\text{10}\)
• store the scissors in the original packaging within a clean, resealable plastic bag labelled with the patient’s name, identification number and date the scissors were first used.\(^\text{11}\)

1.3 Care delivery setting considerations

<table>
<thead>
<tr>
<th>Hospital inpatient (semi-controlled)</th>
<th>Outpatient departments, clinics, general practices (semi-controlled)</th>
<th>Residential facilities (semi-controlled)</th>
<th>Home (uncontrolled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment is single use only or reprocessed according to the manufacturer’s recommendations.</td>
<td>Use sterile (single use) equipment in circumstances where equipment cannot be managed as per the recommendations outlined in 1.2.</td>
<td>Use sterile (single use) equipment in circumstances where equipment cannot be managed as per the recommendations outlined in 1.2.</td>
<td>Use sterile (single use) equipment in circumstances where equipment cannot be managed as per recommendations outlined in 1.2.</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
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</tr>
<tr>
<td>2.1</td>
<td>The use of potable (drinkable tap) water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1</td>
<td>Surgical aseptic technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The use of potable tap water is not acceptable when a surgical aseptic technique is required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2</td>
<td>Standard aseptic technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use a sterilised solution where possible.</td>
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</tr>
</tbody>
</table>

When the use of a sterilised solution is not possible or practical, potable tap water can be used as a wound cleansing solution when a risk assessment of the patient, the wound and the environment is assessed to be low risk. Asepsis remains the aim when potable tap water is used for wound cleansing—avoid using it if there is any concern that the procedure will not meet this standard.

**Tap water declared not potable (unsuitable for drinking) is not to be used for wound cleansing or cleansing of scissors.**

If potable tap water is not available, use only sterilised solutions.

When using potable tap water:

- ensure the cloths/linen used for washing the wound are clean or disposable and used only on the wound
- wherever possible, keep the action of cleansing the wound separate from the action of washing the intact peri-wound and surrounding skin
- run the potable tap water for 30 seconds prior to its use for wound cleansing (water boiled for three minutes and left to cool can also be considered) 17-19
- avoid immersion or soaking of wounds in water.

The use of potable tap water for wound cleansing can include washing the exposed wound under the shower 14, 20-22 or using a container as described in 2.2 and 2.3. 22

<table>
<thead>
<tr>
<th>2.2</th>
<th>Using a container (i.e. bowl or bucket) for wound cleansing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When using a container for wound cleansing ensure it is:</td>
</tr>
<tr>
<td></td>
<td>clean, in good condition and kept for this purpose only</td>
</tr>
<tr>
<td></td>
<td>lined with plastic (e.g. a clean unused plastic bag) prior to use and disposed of after each use. A new plastic lining is required if washing different body parts (e.g. two limbs)</td>
</tr>
</tbody>
</table>
• cleaned before and after use
• stored in a dry, covered area.
Avoid immersing or soaking the wound/s in water.

2.3 Showering for wound cleansing

Using a shower to cleanse a wound involves increased risks that must be considered and managed, for example:

• water running over other body areas prior to reaching the wound and/or faecal or urinary incontinence increases the risk of contamination
• reduced cognitive function might impair the patient’s ability to follow instructions
• shower cubicles are potential sources of significant bacteria and fungus.\(^{23}\)

Wherever possible, washing the wound in the shower must be separated from washing the rest of the body.

It is not acceptable to cleanse:

• wounds in a shared shower space (e.g. a multi-patient use shower in a residential facility or hospital)\(^{14,22}\)
• foot wounds in a shower or bath.\(^{14}\)

2.4 Care of the peri-wound and surrounding skin

Cleansing the peri-wound and surrounding skin—intact skin surrounding the wound—is encouraged\(^{24}\) using:

• potable tap water, a soap free pH appropriate cleanser and disposable or clean cloths/linen, or
• non-alcohol-based skin cleansing wipes.

2.4.1 Lower limb wound considerations

It is recommended when rinsing a lower limb that the foot be placed in an empty container and a separate receptacle is used to pour water over the lower limb (using a container as described in 2.2). Avoid reuse of the collected water over the leg.
2.5 Care delivery setting considerations

<table>
<thead>
<tr>
<th>Hospital inpatient (semi-controlled)</th>
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<th>Residential facilities (semi-controlled)</th>
<th>Home (uncontrolled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>If it is appropriate to cleanse the wound/s in the shower:</td>
<td>If it is appropriate for a patient to remove their bandages/dressings at home and cleanse their wound/s in the shower prior to their clinic appointment:</td>
<td>If it is appropriate to cleanse the wound/s in the shower:</td>
<td>If it is appropriate for the patient to cleanse the wound/s in the shower at home:</td>
</tr>
<tr>
<td>• keep the wound/s covered during general hygiene</td>
<td>• ensure the patient is able to follow instructions and can physically manage the procedure</td>
<td>Assist the patient to:</td>
<td>• ensure the patient is able to follow instructions and can physically manage the procedure</td>
</tr>
<tr>
<td>• after general hygiene care, remove the dressings +/- bandages and cleanse the wound and peri-wound separately in the shower using a soap free pH appropriate cleanser</td>
<td>• assess equipment cleanliness as this is a potential source of contamination (i.e. shower cubicles, linen). Avoid tap water for wound cleansing if there is any doubt regarding equipment cleanliness.</td>
<td>• keep the wound/s covered during general hygiene</td>
<td>• assess equipment cleanliness as this is a potential source of contamination (i.e. shower cubicles, linen). Avoid tap water for wound cleansing if there is any doubt regarding equipment cleanliness.</td>
</tr>
<tr>
<td>• use clean or disposable cloths to cleanse and dry the wound.</td>
<td>Instruct the patient to:</td>
<td>• after general hygiene care, remove the dressings +/- bandages and cleanse the wound and peri-wound separately in the shower using a soap free pH appropriate cleanser</td>
<td>Instruct the patient to:</td>
</tr>
<tr>
<td>If a container is used for wound cleansing:</td>
<td>• keep the wound/s covered during general hygiene</td>
<td>• use clean or disposable cloths to cleanse and dry the wound.</td>
<td>• keep the wound/s covered during general hygiene</td>
</tr>
<tr>
<td>• dispose of used water in a sluice in a separate dirty utility area.</td>
<td>• after general hygiene care, remove the dressings +/- bandages and cleanse the wound and peri-wound separately in the shower using a soap free pH appropriate cleanser</td>
<td>If a container is used for wound cleansing:</td>
<td>• after general hygiene care, remove the dressings +/- bandages and cleanse the wound and peri-wound separately in the shower using a soap free pH appropriate cleanser</td>
</tr>
<tr>
<td>For inpatient specialist burn units follow local protocols.</td>
<td>• use clean or disposable cloths to cleanse and dry the wound.</td>
<td>• dispose of used water in a sluice in a separate dirty utility area or down the toilet.</td>
<td>• use clean or disposable cloths to cleanse and dry the wound.</td>
</tr>
<tr>
<td>If a container is used for wound cleansing in outpatient departments, clinics and general practices:</td>
<td>If a container is used for wound cleansing:</td>
<td>If a container is used for wound cleansing, instruct the patient to:</td>
<td>If a container is used for wound cleansing, instruct the patient to:</td>
</tr>
<tr>
<td>• dispose of used water in a sluice in a separate dirty utility area.</td>
<td>• dispose of used water in a sluice in a separate dirty utility area.</td>
<td>• store it in a dry area, away from potential contaminants such as dirt and pets</td>
<td>• store it in a dry area, away from potential contaminants such as dirt and pets</td>
</tr>
<tr>
<td>If it is appropriate for the patient to remove their bandages/dressings at home and cleanse their wound/s in the shower prior to their clinic appointment:</td>
<td>If it is appropriate for the patient to remove their bandages/dressings at home and cleanse their wound/s in the shower prior to their clinic appointment:</td>
<td>• dispose of used water down the toilet.</td>
<td>• dispose of used water down the toilet.</td>
</tr>
</tbody>
</table>
3 Environmental considerations required when performing a wound dressing procedure

3.1 Environmental considerations

When performing a wound dressing procedure:

- avoid proximity to potential contaminants, including but not limited to commodes, toilets and rubbish bins
- ensure the environment is clean and dust free
- avoid activities such as housekeeping and reduce the risk of infection from airborne sources by closing windows, turning off fans and restricting foot traffic in the treatment area
- avoid carpeted rooms as they are harder and more costly to clean and are more likely to act as a reservoir for infectious agents. (Floor coverings have not been related to healthcare associated infection, however, some studies have identified carpeting as susceptible to contamination by fungi and bacteria)
- position the patient with the wound area/limb on a wipeable surface (as a wipeable surface can be cleaned). Cover fabric surfaces with a protective layer such as a clean towel or waterproof underpad that can be washed or discarded afterwards. Fabric surfaces have been shown to be a source of VRE infections in hospitals
- establish a clear, clean, hard surface to place the wound dressing equipment on and clean the surface. If a clean, hard surface is not available, use a plastic apron or underpad. In the home the underside of the lid from the plastic wound storage container can be used as the hard surface
- place the dressing equipment at a height which prevents contamination from skin scales, fibres and other potential contaminants while performing the procedure.
### 3.2 Care delivery setting considerations

<table>
<thead>
<tr>
<th>Hospital inpatient (semi-controlled)</th>
<th>Outpatient departments, clinics, general practices (semi-controlled)</th>
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<th>Home (uncontrolled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cleaned, stainless steel trolley is the preferred surface for wound dressing equipment and setting up an aseptic field. A cleaned, stainless steel trolley is the preferred surface for wound dressing equipment and setting up an aseptic field. A cleaned, stainless steel trolley is the preferred surface for wound dressing equipment and setting up an aseptic field.</td>
<td>Trolleys without drawers are preferred.</td>
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<td>Use a hard, clean surface for setting up an aseptic field (e.g. table, non-fabric chair or seat). Avoid the floor or bed.</td>
</tr>
<tr>
<td>Trolleys without drawers are preferred.</td>
<td>The dressing trolley should only contain consumables/equipment required for the wound dressing procedure and should not be used as a storage area.</td>
<td>The dressing trolley should only contain consumables/equipment required for the wound dressing procedure and should not be used as a storage area.</td>
<td></td>
</tr>
<tr>
<td>A cleaned over bed table can be used if a trolley is unavailable.</td>
<td>The examination chair/bench is cleaned following each patient’s care.</td>
<td>A cleaned over bed table can be used if a trolley is unavailable.</td>
<td></td>
</tr>
</tbody>
</table>

Wound dressing product supplies are kept at the allocated bulk storage area of the facility as per recommendation 4.2.

Avoid using any open shelf of a dressing trolley as a general storage area. An open lower shelf can be used to transport the specific products required for the residents wound dressings in that wing of the facility for that shift.

For large residential facilities, or to enable storage of wound dressing supplies on the dressing trolley, a multi drawer trolley is recommended. Using a multi-drawer dressing trolley:

- keep the top surface of the trolley clear for setting up an aseptic field.
- store wound dressing supplies in a separate drawer below the top shelf.
- keep the volume of wound dressing supplies to a minimum.
- if storing and transporting open-but-unused dressing products for individual residents in a multi drawer trolley they must be managed as per recommendations 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 7.4, and a separate drawer must be allocated strictly for this purpose. Unopened supplies are not to be stored in the same drawer as open-but-unused wound dressing products.
- observe infection prevention and control measures when accessing the drawers.

**It is recommended that animals be removed from the area where a wound dressing procedure is being performed. Where an animal cannot be removed then provisions may be negotiated that meets the requirements of the HCP and the patient. Animals can be both a source and a mode of transmission of infection.**

The Disability Discrimination Act 1992 (Cth) recognises guide, hearing and assistance dogs cannot be prevented from entering public places. However, the Australian College for Infection Prevention and Control states that full access to certain areas may be restricted. Animal, consumer and HCP hygiene must be adhered to.
4 Storage considerations required when performing a wound dressing procedure

4.1 Storage considerations for wound dressings and equipment used during a wound dressing procedure

The scope of this document is restricted to the storage of wound dressing equipment for individual use on a specific patient. It includes storage of unopened, and open-but-unused equipment. These recommendations do not pertain to bulk storage of unopened dressing equipment in facilities, warehouses, distribution centres and stock rooms.

4.1.1 Storage areas for wound dressing equipment must be kept:

- clean and free of dust, insects and vermin\textsuperscript{15}
- out of direct sunlight
- off the floor
- away from heat sources such as window sills or fire places/heaters and maintained at a stable temperature as per the manufacturer’s recommendations.

4.1.2 Containers used for storage of wound dressing equipment should be:

- plastic with a sealable lid
- large enough to accommodate all wound dressing equipment
- in good condition (clean, dry and not damaged)
- kept clean and dry, and cleaned regularly
- not made of cardboard as it is porous, cannot be cleaned and might harbour micro-organisms, insects or rodents
- protective against moisture
- only used for storage of products or equipment related to the wound dressing procedure.

4.1.3 Provide patients and carers with education and explanation regarding the above requirements.
4.2 Care delivery setting considerations

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Avoid storage of wound dressing equipment in patient rooms. Collect wound dressing equipment immediately prior to the procedure from the bulk storage area.</td>
<td>If it is appropriate to use and store open-but-unused wound dressing products these are managed in accordance with section 5.2.3</td>
<td>Collect wound dressing equipment immediately prior to the procedure from the bulk storage area.</td>
<td>Avoid storage of large amounts of wound dressing equipment in a patient’s home.</td>
</tr>
<tr>
<td>In rooms where patients need transmission-based precautions and require wound dressings, take minimal wound dressing equipment into the patient’s room. Store any unused items according to the above recommendations.</td>
<td>As it is not practicable to have a separate plastic storage container for storage of plastic bags containing open-but-unused wound dressings for each patient, the following options are recommended:</td>
<td>In rooms where patients need transmission-based precautions and require wound dressings, take minimal wound dressing equipment into the patient’s room. Store any unused items according to the above recommendations.</td>
<td>Unopened dressing equipment can only be removed from a patient’s home and used for another patient if the initial patient did not need transmission-based precautions and the packaging remains sealed and intact and can be cleansed (i.e. plastic packaging).</td>
</tr>
<tr>
<td>A new, sterile dressing is opened for every wound dressing procedure and any remaining dressing is discarded.</td>
<td>• the patient takes their sealed plastic bag containing the open-but-unused wound dressings home with them and stores it in accordance with the above recommendations. The patient brings their sealed plastic bag containing the open-but-unused wound dressings with them to their next appointment</td>
<td>If it is appropriate to store open-but-unused wound dressing products these are managed in accordance with section 5.2.3 then stored according to the above recommendations.</td>
<td>If it is appropriate to store open-but-unused wound dressing products these are managed in accordance with section 5.2.3 then stored according to the above recommendations.</td>
</tr>
<tr>
<td></td>
<td>• where this is not possible, clearly labelled, individual, sealed plastic bags for multiple patients are kept in a clean, sealed plastic container in the department/clinic/treatment room. The plastic container must be stored in a separate area or cupboard to the area where unopened and sterile wound dressing equipment is kept.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unopened wound dressing equipment is not stored in the same container as open-but-unused wound dressings. If there is unopened wound dressing equipment that has been obtained for a specific patient, this is stored in a labelled, separate bag or container away from where open-but-unused wound dressings are kept.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unopened wound dressing equipment that has been obtained for a specific patient, is stored in a labelled, separate bag or container away from where open-but-unused wound dressings are kept.
5 Considerations required prior to using ‘open-but-unused’ wound dressing products

5.1 Guidelines

It is recommended that service providers have clear, written and approved guidelines/policies/procedures for managing dressing products, including open-but-unused products if applicable, providing:

- guidance for the HCP e.g. medico legal considerations
- protection for the patient and the HCP e.g. medico legal considerations

5.2 Product considerations in using open-but-unused wound dressings

5.2.1 Product suitability

- The dressing cannot be managed as open-but-unused if cutting it will alter its performance or structural integrity.
- Any opened wound dressing product remaining at the end of the procedure is discarded. Refer to the manufacturer’s recommendations for guidance.
- Collect all equipment and supplies prior to commencing the wound dressing procedure.
- Wherever possible select the most appropriate dressing size to match the wound size to avoid using open-but-unused dressings.
- If larger dressing sizes only are available, and all the other criteria are met, then consider the use of an open-but-unused dressing.

5.2.2 Product management

- Cutting and handling procedures for open-but-unused dressing portions must be managed aseptically to minimise the risk of contamination.
- An open-but-unused wound dressing can only be used for the same patient.

5.2.3 Storage

- An open-but-unused portion of dressing must be contained in its original packaging.
- Discard any remaining dressing if the original packaging is damaged, torn, or unable to be adequately secured.
- Decanting of dressings into alternative containers or non-original packaging is not an acceptable practice.
- Packets containing open-but-unused dressings have the opened end turned over twice and sealed with a tape that can be easily removed without damaging the packaging (e.g. paper tape).
• The secured, original packaging containing the open-but-unused portion of dressing is stored in a clean, resealable plastic bag containing only that open-but-unused dressing.
• Due to the lack of definitive information, any open-but-unused dressing and the resealable plastic bag is kept no longer than four weeks unless the manufacturer states that the shelf life is longer or less once opened. Every time an open-but-unused dressing product is accessed and handled there is an increased risk of contamination.\(^{33}\)
• The patient’s name, date of birth, identification number and date of first use is recorded on:
  o the original packaging of the open-but-unused dressing, or
  o the resealable plastic bag. If there are resealable plastic bags for multiple patients stored in the same area, the patient’s name, date of birth and identification number is clearly identifiable on the outside of the plastic bag to avoid opening the bag except during a wound dressing procedure.
• The patient is provided with information regarding the use and storage of open-but-unused dressings.
• If there are multiple resealable plastic bags containing open-but-unused dressings for different patients, keep them in a separate area, away from other un-opened wound dressing products and equipment.

If any of the above recommendations are unable to be met, the HCP cannot manage the dressing as open-but-unused.

5.3 Care delivery setting considerations

<table>
<thead>
<tr>
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<td>A new, sterile dressing is opened for every wound dressing procedure and any remaining dressing is discarded.</td>
<td>As per the above recommendations.</td>
<td>As per the above recommendations.</td>
<td>As per the above recommendations.</td>
</tr>
<tr>
<td></td>
<td>In areas where the patient is having wound dressings performed in their home in between clinic visits, any remaining portion of newly opened dressing can be sent home with the patient if the above recommendations are met.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6 Patient considerations in determining appropriateness to use open-but-unused wound dressings

6.1 When an open-but-unused dressing should be used with caution

6.1.1 The patient is significantly immunocompromised by disease, medicines, treatment or nutritional deficits

This might include, but is not limited to the following:

- repeated wound infections
- treatment with immunosuppressive medication or cytotoxics
- current radiation or chemotherapy treatment
- poorly controlled diabetes
- known leucopenia
- an underlying immunosuppressive auto-immune condition (e.g. Systemic Lupus Erythematosus (SLE) or Acquired Immune Deficiency Syndrome (AIDS)).

6.1.2 The wound is compromised

For example:

- bone, tendon, muscle, ligament or joint is visible or palpable in the wound
- the wound is a cavity with significant depth and/or sinus, tunnelling or undermining
- a split skin graft was applied less than two weeks prior.

6.2 When an open-but-unused dressing is not to be used

In certain events or therapeutic interventions, only newly opened sterile dressings should be used and any remaining dressing discarded at the end of the procedure. For example:

- dressing vascular access device sites 5. 8. 9. 34
- Negative Pressure Wound Therapy (NPWT)/ Topical Negative Pressure Therapy(TNPT) dressing

6.3 Care delivery setting considerations

<table>
<thead>
<tr>
<th>Hospital inpatient (semi-controlled)</th>
<th>Outpatient departments, clinics, general practices (semi-controlled)</th>
<th>Residential facilities (semi-controlled)</th>
<th>Home (uncontrolled)</th>
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</table>
7 Managing open-but-unused wound dressings aseptically

7.1 Packaging

- Open the wound dressing package to allow sufficient access to the dressing while avoiding contamination of the dressing.

7.1.1 Option 1: The dressing is cut on the aseptic field

- Use forceps to remove the dressing from the packaging without touching the external surfaces of the packaging, and to place the dressing on the aseptic field.
- Use scissors* to cut the required portion from the dressing.
- Avoid contact between the scissor handles and the dressing or the inside surfaces of the packaging.
- Use forceps to replace any open-but-unused dressing portion into the original packaging immediately without touching the external surfaces of the packaging.

*Scissor requirements are determined based on risk assessment prior to commencing the wound dressing procedure as per 1.2.

7.1.2 Option 2: The dressing is cut from within the original packaging

- The dressing packaging is opened sufficiently to allow the insertion of scissors into the packaging to cut the required portion.
- The packaging is held above the aseptic field while cutting, allowing the cut dressing portion to fall onto the aseptic field. The packaging must not come into contact with the aseptic field and the cut portion of dressing must not come into contact with any areas of equipment that have been handled (e.g. forcep handles).
- Avoid contact between the scissor handles and the dressing or the internal surfaces of the packaging.
- The original dressing packaging is not cut when performing this procedure, only the dressing itself.

7.2 Tubes and bottles

7.2.1 Option 1: Using the aseptic field

- Open the tube/bottle and squeeze or pour the required amount onto the aseptic field (a section of the plastic dressing tray is an option).
- At no time must any part of the tube/bottle contact the aseptic field or any equipment on it.
• Using a sterile spatula/tongue depressor, forcep or other sterilised implement, scoop the required amount and apply this to the wound or directly onto a dressing.

7.2.2 Option 2: Using a sterile implement

• Open the tube/bottle and squeeze or pour the required amount directly onto a sterile implement e.g. spatula, tongue depressor, forcep and apply this to the wound.
• At no time must any part of the tube/bottle contact the implement.

7.2.3 Option 3: Using the dressing

• Open the tube/bottle and squeeze or pour the required amount directly onto the dressing and apply this to the wound.
• At no time must any part of the tube/bottle contact the dressing.

7.3 Practice points

• Only tubes or bottles with a resealable cap can be managed as open-but-unused.
• Label the tube or bottle with the patient’s name, identification number and the date of opening.
• Smaller tubes and bottles are stored in a clean, resealable plastic bag (refer 5.2.3).
• Discard any remaining product after four weeks or as indicated by the manufacturer.
• To assist the application of gels and ointments onto wet wound surfaces spread gel or ointment directly onto the secondary dressing.
### 7.4 Care delivery setting considerations

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| A new, sterile dressing is opened for every wound dressing procedure and any remaining dressing is discarded. Only products (such as pharmaceutical solutions) licenced by the manufacturers for multiple dispensing can be used in this manner. | Patients can store the open-but-unused proportion of the dressing in their home environment and bring it back for the next dressing change if the:  
  - open-but-unused wound dressing portions are managed as per 5.2.3  
  - and equipment is managed as per 1.2.1 and 1.2.2.  
  - wound dressings are transported and placed in a storage container in the home as per 4.1 as soon as possible. Patients can attend to their own wound dressings between clinic appointments using the open-but-unused wound dressing portions if:  
  - a risk assessment of the patient has been completed to ensure shared care is appropriate.  
  - the patient has been provided with information and been assessed attending to their own wound dressing.  
  - the patient has been provided with information regarding the use and storage of open-but-unused products. | As per the above recommendations and 1.2.1 and 1.2.2 (managing equipment). | As per the above recommendations and 1.2.1 and 1.2.2 (managing equipment). |
References


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Glossary of Terms

Key Words and Definitions

**Asepsis**: Freedom from infection or infectious material in sufficient quantity to cause infection.

**Aseptic fields**: Aseptic fields provide a controlled aseptic working space to help promote or ensure asepsis during the wound dressing procedure. There are two types of aseptic fields that require different management depending on whether the purpose is to ensure or promote asepsis.

**Aseptic Non Touch Technique (ANTT®)**: A practice framework for aseptic technique and a registered trademark.

**Aseptic technique**: The way in which a wound dressing procedure is performed that aims to prevent pathogenic organisms, in sufficient quantity to cause infection, from being introduced to susceptible sites by hands, surfaces, and equipment. There are two types of aseptic technique that are managed differently depending on whether the purpose is to ensure or promote asepsis. Aseptic techniques are possible regardless of the setting.

**Clean**: Free from dirt, marks or stains.

**Critical aseptic field**: This type of field ensures asepsis and is used for surgical aseptic technique and is used for complex wounds and complex wound dressing procedures. The critical aseptic field requires the use of sterile gloves, sterilised equipment and wound dressings and often full barrier precautions. Wherever possible, a non-touch technique is used.

**Disinfection**: The process of cleaning, usually with a chemical agent, to destroy bacteria (e.g. a neutral detergent wipe).

**Dressing**: A product manufactured for application to a wound and can include primary and secondary dressings. By definition, it is also a medical device.

**Environmental controls**: Taking action/s to minimise environmental risk factors prior to performing a wound dressing procedure. This includes, but is not limited to: removing pets, closing doors or windows, turning off fans with direct flow, and using a room or location away from toilet facilities.

**General aseptic field**: This type of field promotes asepsis and is used for standard aseptic technique for simple wounds and wound dressing procedures. The general aseptic field requires the use of non-sterile gloves, sterilised equipment and sterilised or aseptic wound dressings. A non-touch technique is used.

**Healthcare Professional (HCP)**: Qualified individuals who provide health care.

**Home environment**: Is the place at which the patient resides, e.g. own home, rental property, boarding house. Note: for the purpose of this document it does not include the home environment relating to Residential Facilities.

**Immunocompromised**: The immune response has been diminished by administration of immunosuppressive drugs, by irradiation, by malnutrition, or by underlying disease (e.g. cancer).
Key parts: Equipment used during the wound dressing procedure that comes into contact with the wound (key site), tissue or wound fluid. It is considered contaminated and is treated as a potential source of infection. In the context of wound dressing procedure, this includes (but is not limited to) equipment that has direct contact with the wound, e.g. gauze, forceps, curette and wound dressing products.

Key sites: Are open wounds and medical device access sites.

Open-but-unused: A single use device, whose packaging has been opened but the device, or a portion thereof, was not used and did not come in contact with the wound, blood, tissue or body fluids. In the context of wound dressing procedure this might include (but is not limited to) the remaining unused wound dressing, from which a portion has been cut and used on a wound.

Patient: A recipient of health care. The term is synonymous with – care recipient, client, consumer, individual and resident regardless of setting.

Peri-wound skin: The skin found within 4cms of the wound edge as well as any skin under the dressing.

Personal Protective Equipment (PPE): PPE encompasses gloves, gowns, masks, eyewear or face shield. The type and use of PPE is determined by the potential risk of splash or contact with infectious agents, blood or body fluids.

Potable water: Water that is suitable to drink.

Reprocessing: A validated process used to render a medical device previously used or contaminated fit for subsequent use.

Residential Facilities: A special-purpose facility that provides cohabitation accommodation and other types of support, including assistance with day-to-day living, intensive forms of care, and assistance towards independent living, to residents. This can include, but is not limited to Residential Aged Care Facilities and group houses.

Reuse of single use devices: The Therapeutic Goods Administration (TGA) does not regulate the practice of what products the patient chooses to clean and reuse, for example, single use enteral feeding tubes and urinary catheters, as long as it is for their own use. This does not include wound dressing products.

Semi-controlled environment: A care environment usually within an institutional, clinic or cohabitation setting. The setting is generally run and managed by healthcare professionals.

Sequencing: Performing a wound dressing procedure in an order that is safe, efficient and logical to promote or ensure asepsis.

Single patient use: Devices that can be used multiple times on one patient. Some single patient use devices can be reprocessed and reused on the same patient in accordance with the manufacturer’s instructions.

Single Use Device (SUD): A medical device that is labelled by the original manufacturer as ‘single use’ and is only intended to be used once. This is usually represented by the symbol®. Any single use device that has come into contact with a wound, tissue, blood or body fluids must be disposed of. A single use device cannot be cleaned or reprocessed to be used again. In the context of wound dressing procedure, a single use device might include (but is not limited to): a dressing tray, gauze, dressing product/s applied to a wound, and equipment (e.g. forceps, debridement scissors, and curette).
Standard aseptic technique (simple procedure): A procedural method for performing aseptic technique to promote asepsis. Required for technically simple procedures (involves relatively few and small key sites and key parts) which are short in duration (less than 20 minutes of wound exposure). Performed using non-sterile gloves, using a general aseptic field and non-touch technique. Most standard wound dressing procedures will be suitable for this technique.

Sterile: Equipment and dressings that have been processed and packaged to render them free from microorganisms.

Sterilisation: Physical or chemical procedure to destroy all microorganisms. Sterilisation can be achieved with one or more of the following: heat, chemicals, irradiations, high pressure and filtration.

Surgical aseptic technique (complex procedure): A procedural method for performing aseptic technique to ensure asepsis. Required for technically complex procedures (involving large open key sites or large or numerous key parts) and longer procedures. Sterile gloves and sterile equipment are required and a critical aseptic field is used. Non touch technique is used wherever possible. In the context of wound dressing procedure this might include direct contact with the wound, exposure of the wound for over 20 minutes, and packing of wound surfaces unable to be visualised.

Transmission based precautions (formerly additional precautions): Extra work practices in situations where standard precautions alone may be insufficient to prevent infection (e.g. for patients known or suspected to be infected or colonised with infectious agents that may not be contained with standard precautions alone).

Uncontrolled environment: A care environment usually within a home setting. The setting is generally not run or managed by healthcare professionals. This can include, but might not be limited to a house, apartment or boarding house.

Wound: A breakdown in the protective function of the skin or the loss of continuity of epithelium, with or without involvement of underlying connective tissue (i.e. muscle, bone, nerves, tendon). Includes both acute and chronic wounds which might have occurred due to trauma (e.g. pressure injury, burns), surgery or an underlying disease process (e.g. peripheral arterial disease, chronic venous insufficiency, or neoplasia).

Wound cleansing: The removal of excess exudate, surface contaminants, loose debris, loose non-viable tissue and/or remnants of previous dressings from the wound surface and the wound edge.

Wound dressing procedure: The procedure performed by a healthcare professional to apply treatments directly to a wound. It involves cleansing, plus or minus debridement of the wound, and can involve the application of dressing products, solutions, pharmaceuticals, devices and therapies to the wound.

Wound management: The overall approach taken to treat a patient with a wound. It involves assessment, diagnosis, a comprehensive management plan with consideration of all factors, contributing to, and affecting the wound and the patient, evaluation and documentation. It can involve an inter-professional team to meet all the needs of the patient with a wound. This term is synonymous with the term ‘wound care’.