IV Link Staff

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Infection Prevention & Control
A Learning Package for IV Link Staff

Purpose

Canterbury District Health Board
Te Poari Hauora ō Waitaha

This learning package provides key infection prevention messages and direction for knowledge that you require as a IV Link Rep in your area.

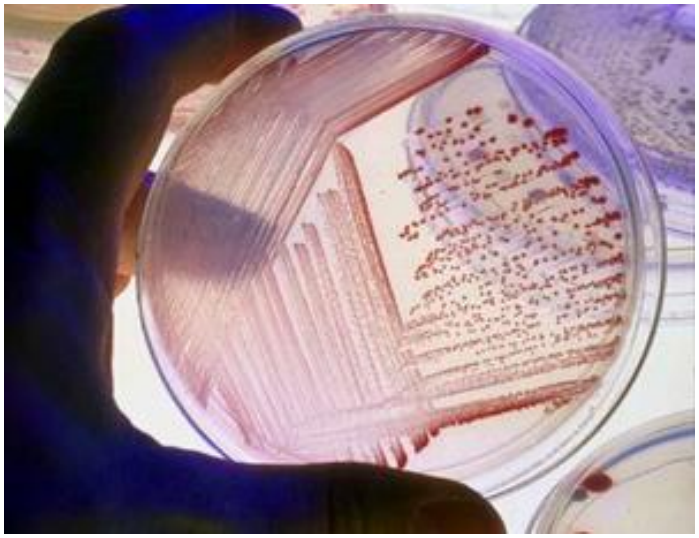
It is recommended that you seek further information on any topic that you are unfamiliar with.

Introduction

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Every year our patients acquire infections through the use of peripheral intravenous catheters.

Infection prevention and control measures have been recognised as effective in minimising this risk.



Overview of Content

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Phlebitis
- Risks and sources of infection
- The 5 Moments for Hand Hygiene
- Aseptic Non-Touch Technique (ANTT)
- Glove use
- Maintenance
- Documentation

Infective Phlebitis

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- The main infective complication of a peripheral intravenous device
- 50% of patients may develop phlebitis
- Early recognition is key to prevention of further complications
- First signs are pain and erythema

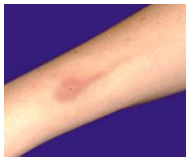
Your Responsibility

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Assessment
  - Use the phlebitis scale
  - Assess each shift
  - Continue to assess three days post removal for phlebitis
  - Remove cannula when not required
- Management
  - Observe each shift
  - Maintain patency
  - Remove when not required
- Documentation

Phlebitis Scoring Scale

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Visual Phlebitis Score			
0	No Symptoms	Observe Cannula	
1	Erythema at insertion site, with or without pain	Observe Cannula	
2	All the above plus oedema	Resite Cannula	
3	All the above, plus streak formation/Palpable Cord	Resite Cannula – Consider Treatment	
4	All the above, plus palpable venous cord > 1 inch (2.54cm) and discharge	Resite Cannula – Consider Treatment	

What did you learn?

1. How often should you assess the site of a peripheral intravenous device for phlebitis?

Risks for IV Infections

Canterbury District Health Board
Te Poari Hauora ō Waitaha

KEY MESSAGE

An IV device presents a risk for infection as it penetrates and bypasses the patient's protective skin barrier

- Site of insertion of IV cannula – lower extremity and over mobile joints
- Emergency placement of IV cannula
- Poor aseptic technique
- Non-adherence to the 5 Moments for Hand Hygiene

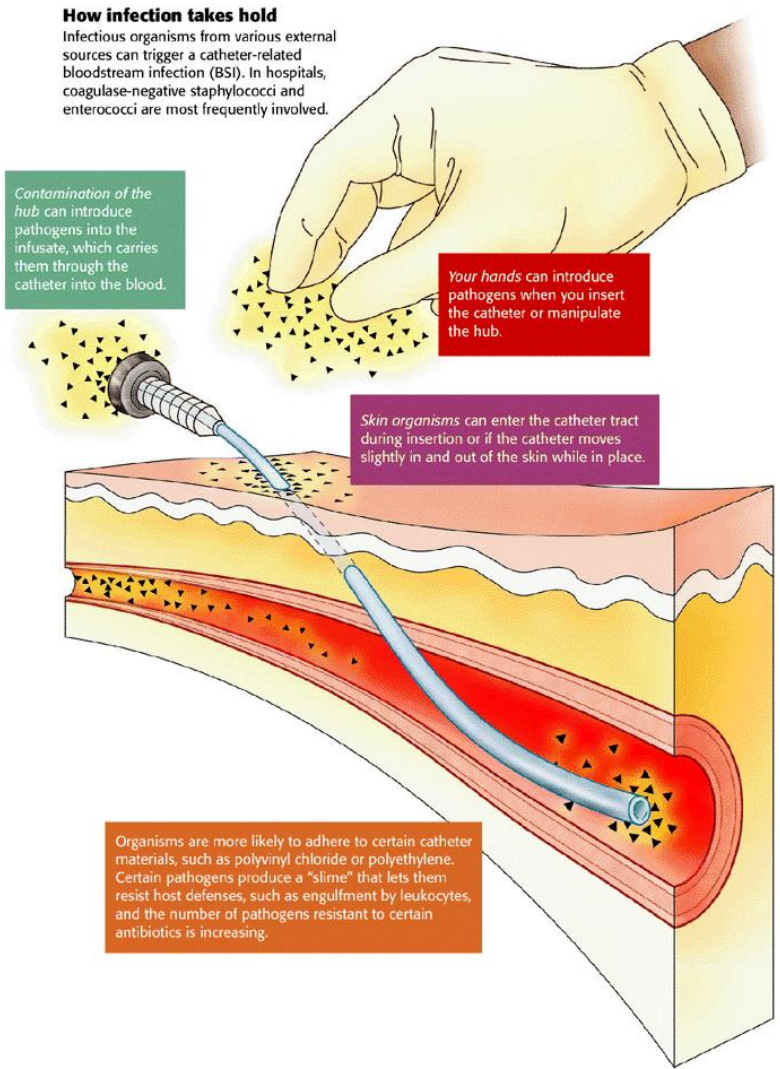
Sources of Infection

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- The source of infection may be endogenous (part of the patient's own skin flora) or exogenous (from the surrounding environment or people)

- The most common source of infection is the patient's skin surrounding the IV site

Portals of Entry for Bacteria



- Bacteria from the patient's skin
- Bacteria contaminating the hub
- Seeding of infection from remote sites in the body
- Bacteria from other external body
- HCW hands
- Contaminated infusate or IV fluid (rare)

What did you learn?

2. Which of the following is the most common source of infection for a peripheral IV device?

a. Contaminated IV fluid

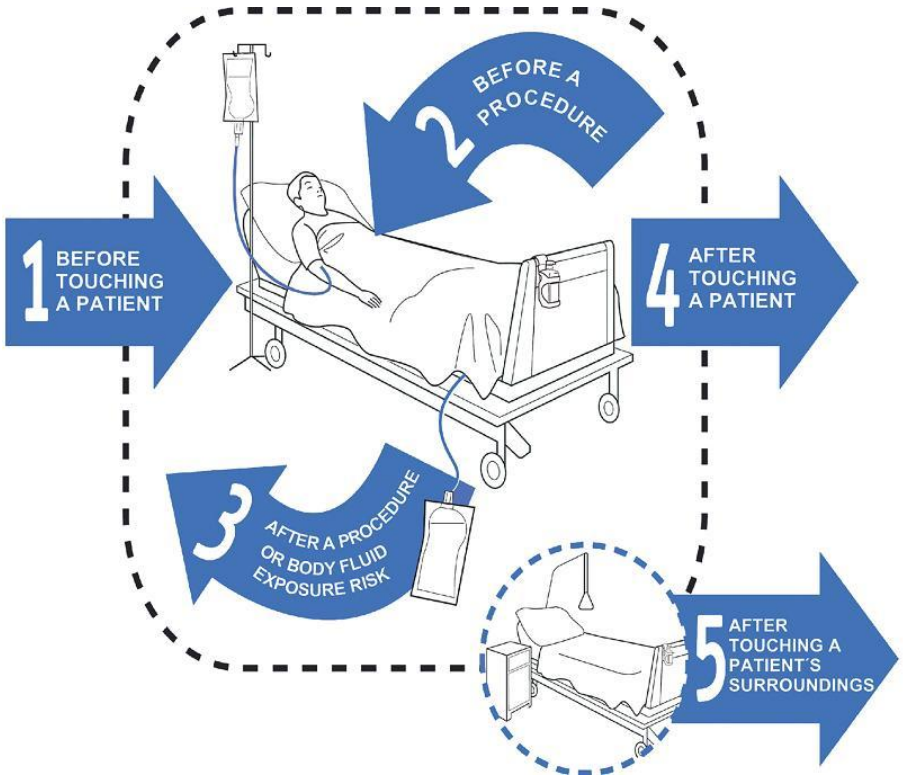
b. Patient's skin around the site

c. Patient's bedside locker

The 5 Moments for Hand Hygiene

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Extremely important with IV practice
- BEFORE and AFTER patient contact
- A patient includes any equipment or tubing attached to them e.g. IV pump or syringe driver

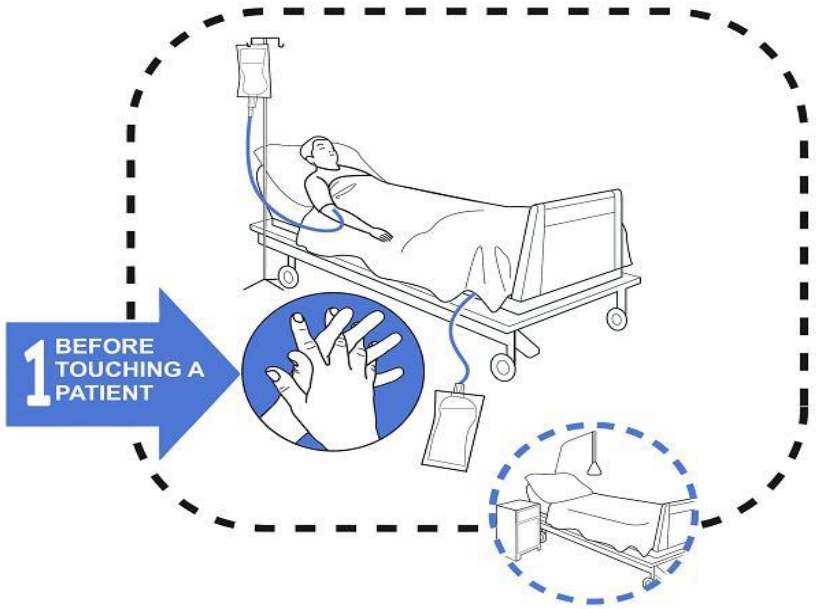


IV Related Hand Hygiene Moments

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Moment 1: Before Touching a Patient

- **Touching a patient in any way**
  - **Touching any invasive medical device connected to the patient (e.g.. IV pump)**



IV Related Hand Hygiene Moments

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Moment 2: Before a Procedure

- **Insertion of a needle into a patient's skin, or into an invasive medical device**
  - **Venipuncture, Arterial blood gas, IV flush**
- **Preparation and administration of any medications given via an invasive medical device, or preparation of a sterile field**
  - **IV medication**
- **Insertion of, or disruption to, the circuit of an invasive medical device**
  - **Vascular access systems**

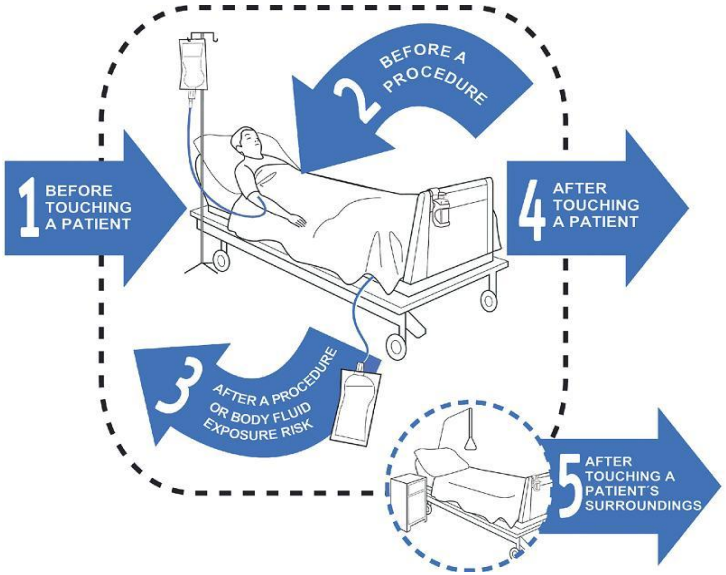
5 Moments Example: Altering the rate of an IV pump

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Perform HH (Moment 1)

Change rate of pump

Perform HH (Moment 4)

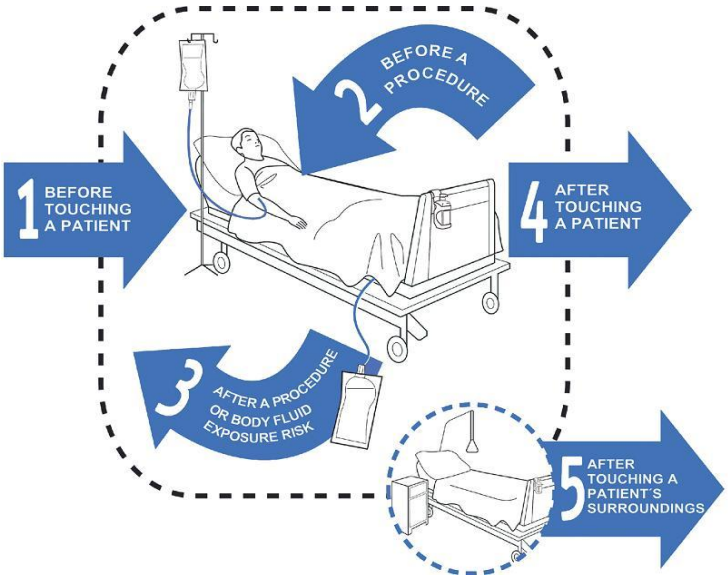


5 Moments Example: Replacing an IV fluid bag

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Perform HH (Moment 2)

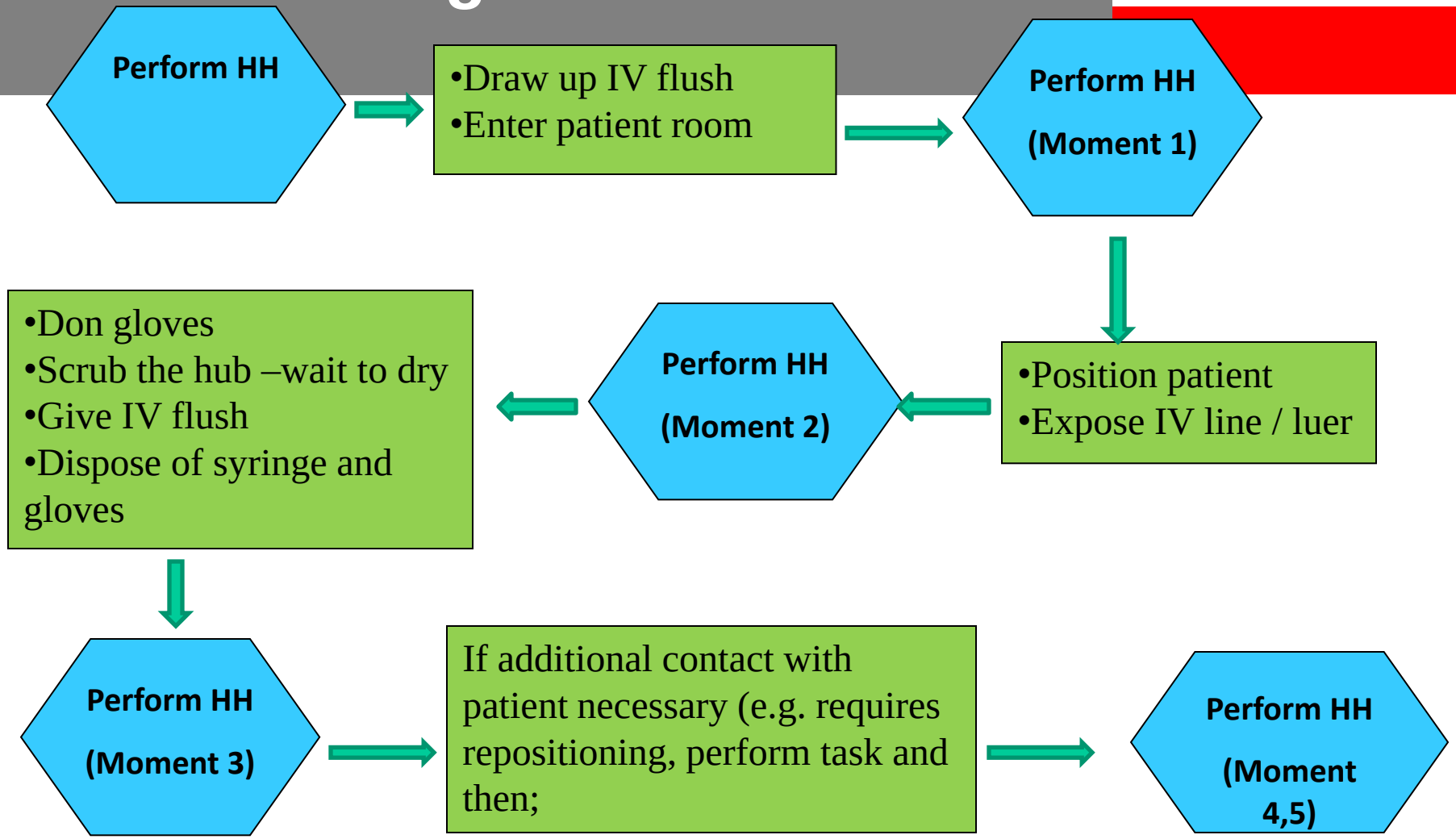
Replace IV fluid bag



Perform HH (Moment 3)

5 Moments Example: Administering an IV flush

Canterbury District Health Board
Te Poari Hauora ō Waitaha



What did you learn?

Canterbury District Health Board
Te Poari Hauora ō Waitaha

3. True or False?

a) Moment 2 is a hand hygiene opportunity practiced prior to giving an IV flush

b) Hand hygiene is NOT required prior to altering the rate on an IV pump or syringe driver as the patient is not touched

Aseptic Non-Touch Technique

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- A modified aseptic procedure may be used where the susceptible site is not touched during a procedure. This involves a non-touch technique (ANTT) and the use of non-sterile gloves.

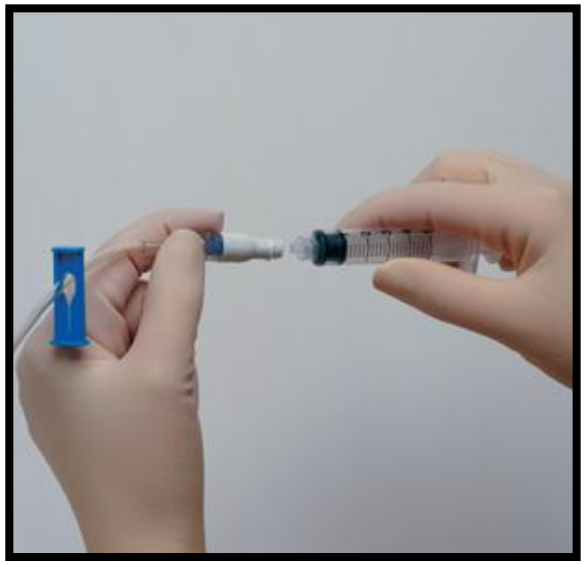
- Sterile gloves **must** be used where a susceptible site may be touched by the gloved hand, if the procedure is likely to be complex or prolonged, and if the susceptible sites cannot be kept aseptic by the non-touch technique.

- Aseptic technique is an integral component of every infusion-related procedure.

Preventing Contamination

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Never contaminate key parts
- Touch non key parts with confidence



What did you learn?

Canterbury District Health Board
Te Poari Hauora ō Waitaha

4. What does ANTT stand for?

Glove Use and Abuse

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Gloves are used to protect the healthcare worker from blood and body fluids
- Hand hygiene must be performed **before** donning and **after** removing gloves
- Gloves **cannot** be decontaminated with ABHR or hand gel

Glove Use and Abuse

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Gloves are not required when reconstituting antibiotics
- If gloves are used to draw up medications they must be changed prior to administering the drug at the patient bedside
- Gloves are **NOT** a substitute for hand hygiene

Documentation

- Documentation is an important part of preventing IV related infections
- Documentation is reviewed by the IP&C service when undertaking audits and surveillance of IV related infections
- Use stickers to document insertion of IV
- Document date on IV dressing
- Document phlebitis score accurately

Answers to Questions

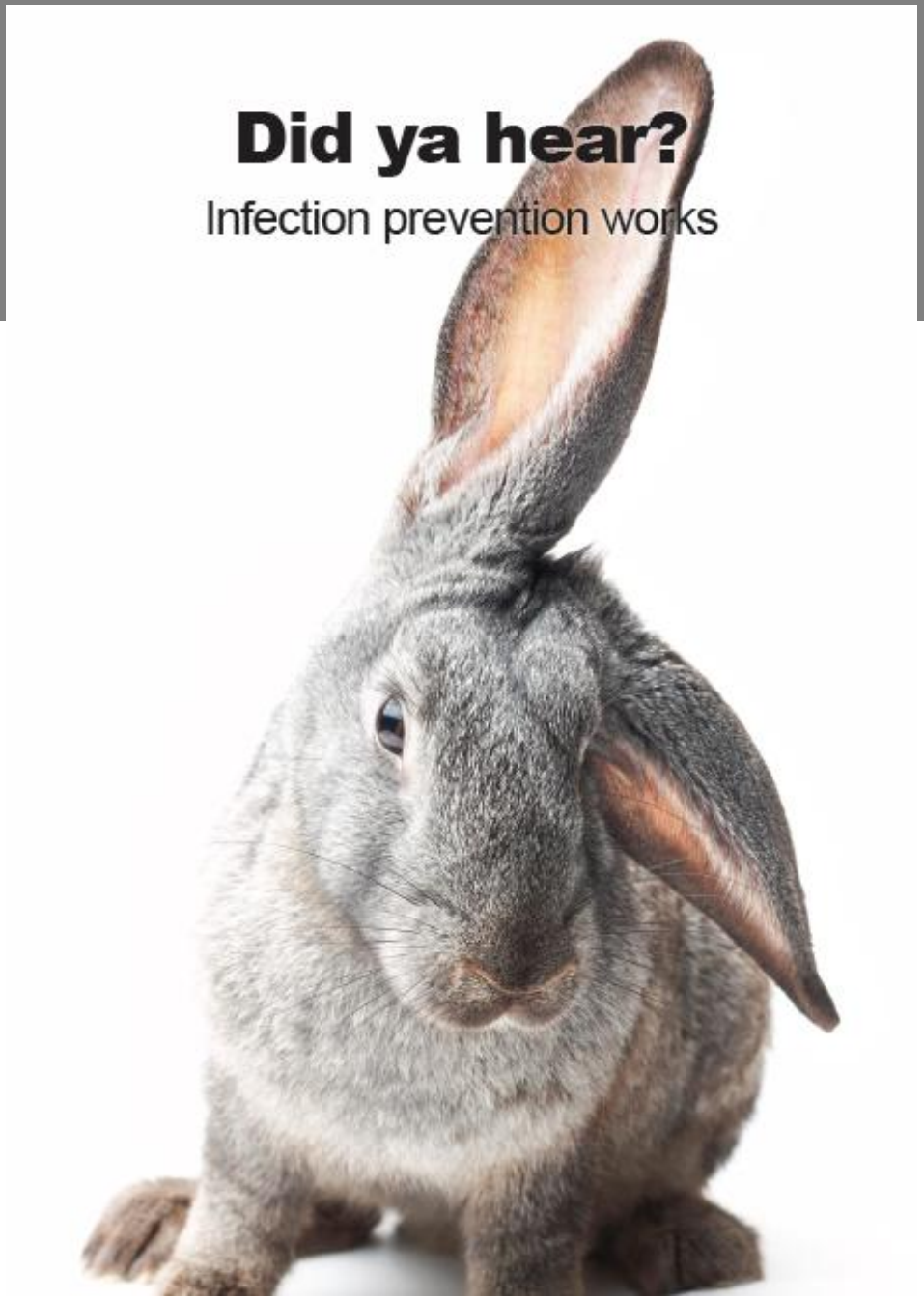
Canterbury District Health Board
Te Poari Hauora ō Waitaha

Question 1: Every shift

Question 2: Patient's skin around the site

Question 3: 3(a) – TRUE 3(b) – FALSE

Question 4: **A**septic **N**on-**T**ouch **T**echnique


Did ya hear?
Infection prevention works