Topic Guide
Infection Prevention and Control

Government
of South Australia

SA Health

Definition of an Incident

Any event or circumstance that resulted, or could have resulted, in unintended and/or unnecessary harm to a person and/or a complaint, loss or damage (SA Health Incident Management Policy).

This guide will assist notifiers to quickly and accurately classify infection and infection prevention and control incidents.

Reporting incidents enables investigation and better understanding of contributing factors, and guides the actions to take to improve care to reduce the risk of harm.

Classification of Infection/infection prevention and control incidents within the Safety Learning System (SLS)

The classification of infection/infection prevention and control incidents is structured around the stages of care to a patient who developed an infection while in hospital and/or as a result of their health care. The following diagram describes the classification tree for infection/infection prevention and control incidents.

Stage in the care cycle (Level 2)	Example types of patient incidents that occur at each stage
Clinical/medical waste management	There is an incident with clinical or medical waste, or a sharp implement.
Environmental Hygiene/ Cleaning	Inadequate environmental cleaning procedures.
Hand hygiene processes/ procedures	Inadequate hand hygiene practices or supplies.
Invasive medical device management	Inadequate device maintenance, management or documentation. Processes not followed.
Standard and transmission-based precautions/protocols	Inadequate documentation, communication, signage. Inappropriate PPE supplied or used. Incorrect patient placement or precautions.
Sterilisation and reprocessing procedures	Instrument cleaning or tracking failures. Packaging or stock storage issues
Aseptic technique/surgical asepsis	Breach of aseptic field/technique. PPE non-compliance.
Suspected healthcare associated infection	Infections associated with care within a healthcare facility.
Suspected outbreak	Infection outbreak.

When notifying and reviewing incident reports, consider:

> When - at what time did the incident occur?

> Where - at which location did the incident occur?

> Who - which staff were involved, and which manager needs to review the incident?

> What - were the contributing factors for this patient incident?

Systems that underpin excellence in infection/infection prevention and control

> Data collection through reporting and auditing
> Review of quality and safety (patient incidents), and system improvement
> Effective communication of accurate, complete and comprehensive information within and between teams
> Effective communication with patients, families and carers to ensure they are informed about patient care and understand their individual needs.

Level 1 – Infection/Infection Prevention and Control								
Level 2								
Clinical/ medical waste management	Environmental Hygiene/ Cleaning	Hand hygiene processes/ procedures	Invasive medical device management	Standard transmission-based precautions/ protocols	Sterilisation and reprocessing procedures	Aseptic technique/ surgical asepsis	Suspected healthcare associated infection	Suspected outbreak
Level 3								
Inappropriate management of clinical/ medical waste	Inadequate discharge/ terminal cleaning	Inadequate hand hygiene facilities/ supplies	Recommended dwell time exceeded	Inadequate documentation/ communication/ signage	Failure of cleaning/ disassembly	Breach aseptic field/ technique	Bloodstream infection	Gastroen-teritis
Inappropriate management of sharps	Inadequate cleaning following procedure/ intervention	Incorrect glove use/ practice	Inadequate device maintenance	Inadequate supplies of personal protective equipment (PPE)	Process/ procedure/ tracking failure (sterilising/high level disinfection)	Breach/ non-compliance personal protective equipment (PPE)/ theatre attire	Bloodstream infection, with device	Respiratory infection
	Inadequate standard/daily cleaning	Missed hand hygiene opportunity/ moment	Inadequate monitoring of insertion site	Inappropriate precautions implemented	Delay/failure in recall procedures	Process/ procedure not followed/ adhered	Wound or surgical site infection	Skin infection
	Inadequate decontamination/ cleaning of shared patient equipment		Inadequate device decontamination	Incorrect patient placement/ isolation	Storage of sterile stock		Urinary tract infection	Infection other site/focus
			Unrequired device left in situ	Inappropriate PPE used	Packaging issues		Urinary tract infection, catheter related	
			Incomplete documentation	Process/ procedure not followed/ adhered	Loan set issues		Skin infection	
			Process/ procedure not followed/ adhered				Infection associated with prosthetics/ implantable devices	
							Respiratory infection	
							Pneumonia	
							Gastroenteritis	
							Infection other site/ focus	

Example incidents and how to classify at Level 2 and Level 3

Level 2 – Clinical/medical waste management

What happened?
> Full urinary drainage bag found in general waste

> Unsheathed syringe left on the patient table

> Sharps disposal container filled above the specified fill line

Level 3 Classification
> Inappropriate management of clinical/medical waste

> Inappropriate management of sharps

Examples:

The reporter states that when emptying the general waste into the large bin it was noted that a urinary drainage bag was found half full of urine.

        Level 3 Classification: Clinical/medical waste
        Contributing Factor(s)   Procedure / guideline / protocols not followed

While the nurse was changing bed linen, an unsheathed needle was found in bed under the patient.

        Level 3 Classification: Sharps
        Contributing Factor(s):   Procedure / guideline / protocols not followed

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Level 2 – Environmental hygiene/cleaning

What happened?
> Dried blood found on dialysis equipment

> Patient beds cleaned with out of date cleaning solution

> Suction canister not changed between patients

> Blood left uncleaned on the floor following IV cannulation

Level 3 Classification
> Inadequate decontamination/ cleaning of shared patient equipment

> Inadequate standard/ daily cleaning

> Inadequate discharge/ terminal cleaning

> Inadequate cleaning following procedure/ intervention

Examples:

Following IV cannulation of a patient, all rubbish and insertion paraphernalia left unattended at bedside.

        Level 3 Classification: Inadequate cleaning following procedure/ intervention
        Contributing Factor(s):   Procedure / guideline / protocols not followed, not available

Patient admitted to a room which had not undergone cleaning after previous patient discharge

        Level 3 Classification: Inadequate discharge/ terminal cleaning
        Contributing Factor(s):   Procedure / guideline / protocols not followed, not available

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Level 2 – Hand hygiene processes/procedures

What happened?
> No soap available in patient bathrooms

> On ward round MO commenced patient examination without doing hand hygiene

Level 3 Classification
> Inadequate hand hygiene supplies

> Missed hand hygiene opportunity/moment

Examples:

Wound dressing commenced with gloves on, chair was the moved with gloved hands then alcohol gel applied to gloves before dressing continued.

        Level 3 Classification: Incorrect glove use/practice

Contributing Factor(s):	Procedure / guideline / protocols not followed

Level 2 – Invasive medical device management

What happened?
- IV cannula left in-situ for 8 days
- Day 1 PICC Dressing not changed until day 4
- Patient discharged home with IV cannula in-situ
- No IV device alert sticker in case notes or insertion date sticker

Level 3 Classification
- Recommended dwell time exceeded
- Inadequate device maintenance
- Unrequired device left in-situ
- Incomplete documentation

Examples:

At handover the nurse stated that the patient had ceased IV antibiotics, when staff attended patient care, an IV device was discovered.

Level 3 Classification:	Unrequired device left in-situ
Contributing Factor(s):	Procedure / guideline / protocols not followed

Level 2 – Standard and transmission-based precautions/protocols

What happened?
- Staff unaware of patient MRO status following down transfer
- Urine bag leak identified, no gloves available in bay for clean up
- *C. difficile* positive patient recovered in normal recovery bay with no additional precautions

Level 3 Classification
- Inadequate documentation/ signage/ communication
- Inadequate supplies of personal protective equipment (PPE)
- Inappropriate precautions implemented

Examples*:*

Patient with a history of VRE admitted to a shared room, no contact precautions in place. Ward unaware of patient's history as OASIC not checked at time of admission.

Level 3 Classification:	Incorrect patient placement/isolation
Contributing Factor(s):	Procedure / guideline / protocols not followed

Level 2 – Sterilisation and reprocessing procedures

What happened?
- Bone fragments found on sterile drill bit
- Loan ultrasound probe not processed prior to shipment
- Hole found in sterile instrument tray wrapping
- Scope tracking documentation incomplete

Level 3 Classification
- Failure of cleaning/ disassembly
- Loan set issues
- Packaging issues
- Process/procedure/ tracking failure (sterilising/high level disinfection)

Example:

Scope left in a dirty state, with no indication of which patient it was used on. Scope used sometime between Friday night and Monday morning.

Level 3 Classification:	Process/procedure/ tracking failure
Contributing Factor(s):	Procedure / guideline / protocols not followed

Level 2 – Aseptic technique/ surgical asepsis

What happened?

> Sterile field contaminated by student nurse removing specimens from scrub nurse's trolley

> Nurse accessing IV cannula not using appropriate aseptic procedure equipment

Level 3 Classification

> Breach aseptic field/ technique

> Process/procedure not followed/adhered

Example:

Whilst closing the uterus, the surgeon pricked the finger (breaking the skin) of the assisting Intern with the suture needle and then proceeded to continue to suture the patient with the contaminated needle.

Level 3 Classification:	Breach/non-compliance personal protective equipment (PPE)
Contributing Factor(s):	Procedure / guideline / protocols not followed

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Level 2 – Suspected healthcare associated infection

What happened?

> UTI identified in patient with indwelling urinary catheter

> Small blisters found on patient buttocks, arms & legs.

> Deep wound infection identified in patient with hip prosthesis

> Patient unwell and had positive blood culture

Level 3 Classification

> Urinary tract infection, catheter related

> Skin infection

> Infection associated with prosthetic/ implantable devices

> Bloodstream infection

Example:

Patient unwell 5 days post biliary stent insertion. Blood culture taken - positive for enterococcus sp.

Level 3 Classification:	Bloodstream infection
Contributing Factor(s):	

Level 2 – Suspected Outbreak

What happened?

> Several patients develop flu-like symptoms following ward patient being diagnosed with Influenza A

> Several residents identified with suspected scabies

> Multiple patients identified as colonised with a resistant organism following identification of the resistant organism in a patient's clinical specimen

Level 3 Classification

> Respiratory infection

> Skin infection

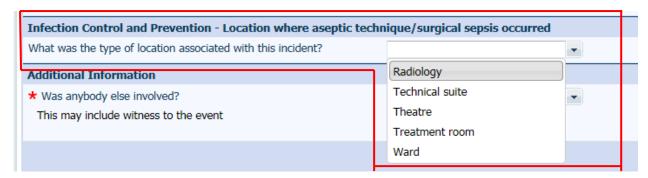> Infection other site/focus

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Example:

Norovirus isolated from 86 year old patient. 7 patients subsequently develop vomiting and diarrhoea. 2 bays have been put on contact and droplet precautions over the weekend. 8 patients (excluding the index) and 3 staff developed symptoms over the next week.

Level 3 Classification:	Gastroenteritis
Contributing Factor(s):	

New questions/additional information

When selecting Level 2 and/or Level 3 classifications, there is the opportunity to provide further information in relation to the incident, depending on the classification selected.

As an example if at Level 2 Aseptic technique/surgical asepsis is selected, then the following question will be asked:

Contributing factors

In the future SLS will provide a list of contributing factors for notifiers to select the most relevant for the incident. For now, this information can now be recorded in the 'What happened' field. Knowing the pattern of contributing factors helps to plan the actions to take to reduce the risk of recurrence.

Examples of contributing factors for infection/infection prevention and control incidents:

> Information - failure of Electronic Medical Record (Sunrise/EMR) System
> Documentation – quality of information
> Documentation – availability of information
> Patient – non-compliance / refusal / or challenging behaviour
> Staff – procedure / guideline / protocols not followed, not available
> Staff – knowledge / skills / competency
> Staff – allocation / scheduling / availability
> Staff – work culture
> Work – physical environment
> Work – facilities management, maintenance

References

Terminology

> Healthcare associated infections (HAI) are those infections that are acquired as a direct or indirect result of healthcare.
> Clinical/medical waste is defined as waste consisting of all sharps, human tissue including bone, any liquid body fluid, and laboratory specimens.
> Hand Hygiene means cleaning your hands with soap and water or an alcohol-based hand rub.
> Hand Hygiene Australia - 5 moments for hand hygiene

Hospital Acquired Complications of Care

These are considered to be patient incidents. The SLS provides a place to record the open disclosure with the patient, and also the investigation undertaken (to uncover ways to reduce risk of their recurrence).

Several of the currently listed **Hospital acquired complications of care** may relate to the infection/infection prevention and control classification, for example:

        o   Healthcare-associated infection

- o Surgical complications requiring unplanned return to theatre
- o Unplanned intensive care unit admission
- o Respiratory complications

What are patient incidents? ([SA Health Patient Incident and Open Disclosure Policy Directive](#))

> **An incident** is any event or circumstance which could have (near miss) or did lead to unintended and/or unnecessary psychological or physical harm to a patient or consumer or that occurs during an episode of health care.

> **A harmful incident** means any event or circumstance which resulted in unintended and/or unnecessary psychological or physical harm to a patient or consumer during an episode of health care. For example, the patient received incorrect medication and became very ill.

> **No harm** means the incident occurred and the patient or consumer was exposed, but no harm resulted, for example the patient received a double dose, but there were no harmful effects.

> **A near miss** is a patient incident that did not cause harm, but had the potential to do so, for example the nurse was about to administer the medication, but on checking realised that this medication was contraindicated for a patient with this condition, and so the incident was averted.

Appendix 1 – Healthcare Associated Infections (HAI)

> [SA Health Patient Incident and Open Disclosure Policy Directive](#)

SA Health has several policies and guidelines relevant to healthcare associated Infections:

> [SA Health HAI Prevention Policy Directive](#)
> [SA Health HAI Surveillance Policy Directive](#)
> [SA Health Multi-resistant Organism (MRO) Guidelines](#)
> [SA Health Hand Hygiene Policy Directive](#)
> [SA Health Hand Hygiene Guideline](#)
> [SA Health Infection Control Management of Infectious Diseases](#)
> [SA Health Cleaning Standard for Healthcare Facilities](#)
> [SA Health Peripherally Inserted Central Catheter (PICC) Dressing Management Clinical Guideline](#)
> [SA Health Peripherally Intravenous Cannula (PIVC) Infection Prevention Clinical Directive](#)

National policies and guidelines relevant to healthcare associated Infections:

> [Preventing and Controlling Healthcare-Associated Infection Standard](#)
> [Australian Guidelines for the Prevention and Control of Infection in Healthcare 2019](#)

SA Health documentation

SA Health requires that relevant infection control information (e.g. MRO History) is recorded:

> in the medical record
> on the medication chart
> in Sunrise EMR (EPAS)
> in the discharge summary.

In addition, relevant infection control information is considered critical information and must be included in medical/nursing handover.