



# SURGICAL and RADIOLOGY SAFETY CHECKLIST

## OVERVIEW

### THIS DOCUMENT

This guidance statement provides direction on the use of the Surgical Safety Checklist and Radiology Safety Checklist.

### PURPOSE

To promote patient safety by instituting the Surgical and Radiology Safety Checklist for all patients having invasive/surgical procedure(s) in an operating room or other designated clinical space where it is agreed a checklist should be used.

### RESPONSIBILITY

All medical, technical and nursing staff within the perioperative setting.

### HISTORY

The Surgical Safety Checklist (SSC) was designed by the World Health Organization to reduce morbidity and mortality within the perioperative phase. The Radiology Safety Checklist (RSC) (Appendix B) was devised by the Royal College of Radiologists as an adaptation of the SCC.

In 2012 the SSC was further adapted to the New Zealand setting and converted to a paperless version by the Health Quality and Safety Commission New Zealand (HCSC) (Appendix A). This version is designed to be utilised alongside other initiatives to improve perioperative teamwork and communication. Some Interventional Radiology departments in New Zealand converted to a paperless version in 2013 following the same principles as the SSC version .

The Perioperative Nurses College endorses the use of a SSC/ RSC for all cases, except in an emergency if the risks outweigh the benefits.

### PRINCIPLES

The SSC/RSC involves the entire Operating / Procedure Team, with aspects of the SSC/RSC performed by specific team members. However, it is the collective responsibility of all team members to actively participate in the SSC/RSC. Administration of the checklist domains and items is not a discretionary exercise. All items must be administered, or the reason for not considering them verbally stated.

Imaging (if applicable) shall be visible at the same time the Time Out check is being completed.

Antibiotic prophylaxis and venous thromboprophylaxis (if applicable) should be discussed at the same time as the Time Out. Omission of the SSC/RSC should be documented

The SSC and RSC can be found in 2 distinct forms, the traditional “tick box” checklist or verbal prompt posters for Sign In, Time Out and



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Sign Out with a single “tick box” in surgery / procedure documentation confirming the processes were followed.

Vogts et al (2015) demonstrated that the tick box mentality associated with the paper form of SSC or RSC was seen to be virtually useless as a record of actual events.

### AUDITING

Compliance with SSC /RSC should be monitored in accordance with recommendations from NZ health Quality and Safety Commission.

### CHECKLIST PROCESS

### PROCESS

The table describes the SSC/RSC process

STAGE	DESCRIPTION
<b>Sign In Phase</b>	Occurs before induction of anaesthesia in the Operating Room/Procedure Room Lead by anaesthetist
<b>Time Out Phase</b>	After positioning – before skin incision/commencement of procedure Lead by proceduralist
<b>Sign Out Phase</b>	Before the patient leaves the Operating Room/Procedure Room Lead by nurse

#### Note:

- In procedures that do not require an anaesthetist, the sign in will be led by the staff member responsible for bringing the patient into the procedure room.
- The proceduralist may be whoever is leading the procedure. For example; the surgeon, radiologist, nurse practitioner or RNFSA (when dual operating rooms are being utilised and the RNFSA is performing the approach surgery).

### NON AGREEMENT AND NEAR MISSES

Any non-agreement within the procedural team is to be resolved before the procedure can progress.  
When a potential adverse event/near miss, has been identified via the SSC/RSC process this must be documented for auditing purposes (adhere to local reporting policies).



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### ASSOCIATED DOCUMENTS

The table below indicates other documents associated with this recommended best practice.

TYPE	DOCUMENT TITLES
Health Quality Safety Commission New Zealand	<ul style="list-style-type: none"><li>• Surgical Team Work and Communication <a href="http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/">http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/</a></li><li>• Surgical Safety Checklist <a href="http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/interventions/surgical-safety-checklist/">http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/interventions/surgical-safety-checklist/</a></li></ul>
World Health Organization	<ul style="list-style-type: none"><li>• World Health Organization. World Alliance for Patient Safety. Implementation Manual Surgical Safety Checklist 1<sup>st</sup> Edition. <a href="http://www.who.int/patientsafety/safesurgery/ss_checklist/en/">http://www.who.int/patientsafety/safesurgery/ss_checklist/en/</a></li></ul>
NZNO Perioperative Nurses College	<ul style="list-style-type: none"><li>• Surgical / Procedural Site Marking</li></ul>
Royal Australasian College of Surgeons	<ul style="list-style-type: none"><li>• Implementation Guidelines for Ensuring Correct Patient, Correct Side and Correct Site Surgery, <a href="http://www.surgeons.org/racs/college-resources/publications/position-papers/correct-patient,-correct-side-and-correct-site-surgery">http://www.surgeons.org/racs/college-resources/publications/position-papers/correct-patient,-correct-side-and-correct-site-surgery</a></li></ul>
Royal College of Radiologists	<ul style="list-style-type: none"><li>• Guidance on implementing safety checklists for radiological procedures. (Second edition) 2019</li></ul>
Australian Patient Safety Foundation	<ul style="list-style-type: none"><li>• Use of Surgical and radiology checklists in Australian hospitals: uptake, barriers and enablers (Joanna Briggs Institute)</li></ul>
Royal Australian & New Zealand College of Ophthalmologists (RANZCO)	<ul style="list-style-type: none"><li>• Correct Eye Surgery Guidelines. <a href="http://www.ranzco.edu/aboutus/ranzco-policies-and-procedures/policy/Correct_Eye_Surgery_Guidelines.pdf/view">http://www.ranzco.edu/aboutus/ranzco-policies-and-procedures/policy/Correct_Eye_Surgery_Guidelines.pdf/view</a></li></ul>



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NHS National Patient Safety Agency (UK) NPSA	<ul style="list-style-type: none"><li>• Surgical Safety checklist <a href="http://www.nrls.npsa.nhs.uk/resources/clinical-specialty/surgery/?entryid45=59860">http://www.nrls.npsa.nhs.uk/resources/clinical-specialty/surgery/?entryid45=59860</a></li></ul>
Health Quality Safety Commission New Zealand	<ul style="list-style-type: none"><li>• Surgical Team Work and Communication <a href="http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/">http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/</a></li><li>• Surgical Safety Checklist <a href="http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/interventions/surgical-safety-checklist/">http://www.hqsc.govt.nz/our-programmes/safe-surgery-nz/projects/surgical-teamwork-and-communication/interventions/surgical-safety-checklist/</a></li></ul>
References	<ul style="list-style-type: none"><li>• Vogts N, Hannam JA, &amp; Mitchell SJ (2015) Checking the checkers: self-reporting of the WHO Surgical Safety Checklist by OR staff. Auckland District Health Board Quality Account 2014-2015. In press 2015</li></ul>



# SURGICAL and RADIOLOGY SAFETY CHECKLIST



## Appendix A: The Health Quality and Safety Commission's Surgical Safety Checklist



# SURGICAL and RADIOLOGY SAFETY CHECKLIST



## Surgical safety checklist

1

### Sign in

**Confirm surgeon available**  
**Before induction of anaesthesia, confirm with patient:**

- Identity
- Site and side
- Procedure
- Consent

**Site marked or not applicable**

**Does the patient have:**

**Known allergies?**

**Difficult airway or aspiration risk?**

If yes, is equipment/ assistance available?

**Risk of >500 ml blood loss recorded (7 ml/kg in children)?**

If yes, are adequate intravenous access and fluids planned?

**Anaesthesia safety checklist completed**

**Check and confirm prosthesis/ special equipment to be used**

2

### Time out

**Before an incision, confirm all team members have introduced themselves by name and role**

**Surgeon, anaesthetist, and nurse verbally confirm:**

- Patient
- Site and side
- Procedure
- Consent
- Any known allergies

**Anticipated critical events**

**Surgeon reviews:**

Critical or unexpected steps, operative duration, anticipated blood loss?

**Anaesthesia team reviews:**

Patient specific concerns?

Has the ASA score been recorded?

**Nursing team reviews:**

Has sterility (including indicator results) been confirmed?

Are there equipment issues or concerns?

**Has antibiotic prophylaxis been given within the last 60 minutes?**

**Has the plan for VTE prophylaxis during the operation been carried out?**

**Is essential imaging displayed?**

3

### Sign out

**Verbally confirm with the team after final count:**

- The name of the procedure recorded
- That instrument, needle, sponge and other counts are correct
- How the specimen is labelled (including patient name)
- The plan for ongoing VTE prophylaxis
- Whether there are any equipment problems to be addressed
- Postoperative concerns/plan for recovery and management of this patient





[newzealand.govt.nz](http://newzealand.govt.nz)



## Appendix B: Radiology Safety Checklist - Royal College of Radiologists UK

### WHO Surgical Safety Checklist: for Radiological Interventions ONLY

(adapted from the WHO Surgical Safety Checklist)

National Patient Safety Agency  
National Reporting and Learning Service

**SIGN IN** (To be read out loud)

**Before giving anaesthetic (local or general)**

Have all team members introduced themselves by name and role?  
 Yes

All team members verbally confirm:  
 What is the patient's name?  
 What procedure, site and position are planned?  
*If general anaesthetic given the two questions above should be moved to the beginning of TIME OUT*

Has the patient confirmed his/her identity, site, procedure and consent?  
 Yes

Has essential imaging been reviewed?  
 Yes  N/A

Are all IRMER requirements met?  
 Yes

Is the procedural site marked?  
 Yes  N/A

Is the anaesthesia machine/monitoring equipment and medication check complete?  
 Yes  N/A

Does the patient have a known allergy?  
 No  Yes  
 anticipated risk of >500ml blood loss (7ml/kg in children)?  
 No  Yes (and adequate IV access/fluids planned)

Have risk factors for bleeding and renal failure been checked?  
 Yes  N/A

Has Antibiotic prophylaxis been given?  
 Yes  N/A

Has VTE prophylaxis been undertaken?  
 Yes  N/A

Is the required equipment available and in date?  
 Yes

Are there any critical or unexpected steps you want the team to know about?  
 Yes  N/A

**ONLY IF GENERAL ANAESTHETIC IS GIVEN**

**TIME OUT** (To be read out loud)

**Before start of radiological intervention**  
(for example needle to skin)

Anticipated critical events

Anaesthetist (if present):  
 Is the anaesthetic machine check complete?

Does the patient have a difficult airway/aspiration risk?  
 Yes  N/A

Are there any patient-specific concerns?  
 What is the patient's ASA grade?  
 What monitoring equipment and other specific levels of support are required, for example blood?

Registered practitioner/HCA:  
 Are there any equipment issues or concerns?

Has the surgical site Infection (SSI) bundle been undertaken?  
 Yes  N/A
 

- Antibiotic prophylaxis
- Patient warming
- Hair removal
- Glycaemic control

**SIGN OUT** (To be read out loud)

**Before any member of the team leaves the room**

Registered Practitioner/HCA verbally confirms with the team:

Has the name and side of the procedure been recorded?  
 Have all pieces of invasive equipment used been accounted for?  
 Have any implanted devices been recorded?  
 Have the specimens been labelled (including with patient's name)?  
 Have any equipment problems been identified that need to be addressed?

Radiologist, Anaesthetist and Registered Practitioner:  
 Have the instructions for post procedural care for this patient been agreed?

Remember to scan onto CRIS  
or record checklist has been undertaken

**PATIENT DETAILS**

Last name:

First name:

Date of birth:

NHS Number:

Date of Procedure:

\*If the NHS Number is not immediately available, a temporary number should be used until it is

**The checklist is for Radiology Interventions ONLY**

This modified checklist must not be used for other surgical procedures.

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