

General				
Action	Yes	No	Comments/How?	Source

Basic general hospital statistics

Hospital type			Tertiary rural mission hospital	8
Total number of beds			100	7
Number of operating theatres			4	7
Number of surgeries per year			about 300 depending on present surgeons	7

CSSD general information

Number of CSSD staff			01-Feb	7
Number of OT nurses			6, 5 during surgery	8
Number of Biomedical technicians			0	8
Who reprocesses the laparoscopic instruments			OT nurses	8

Compliance with standards is verified against:

There is record keeping of sterile reprocessing	x		none	7
There is periodic review of reprocessing performance	x		Paper based, autoclave tape results	
Product descriptions/documentation are available for all products to be sterilized		x		7
There is a procedure for new materials/instruments		x		7
Disposables are being reprocessed and reused	x			7
What types?			Ports, ESU knives, Vessel sealers, lap instruments	
Number of reuses is documented		x		7
How often			Not tracked	

For instruments that can be disassembled, (manufacturer) instructions are available for disassembly

There is a written protocol for manual cleaning	x			4,7
There is a protocol for repair of instruments		x		7

Cleaning facilities in and around the OT

Action	Yes	No	Comments/How?	Source
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How often are the OT and cleaning areas cleaned?	x		Daily	7
Sinks are cleaned at the end of the day		x		7

Personal protection

Sufficient personal protection devices are available such as				4,7
Gloves of different materials		x		7
Watertight aprons with long sleeves		x		7
Safety goggles		x		7
Splash screen		x		7

Equipment in the OT

Compressed air gun		x		7
Water gun		x		7
Hand Shower		x		7
Ultrasonic cleaner		x		3
Flash autoclave		x		8
Compressed Air		x		8
Sink where instruments are rinsed	x			

Other equipment

			8
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The disinfectant trays (for Cidex) are kept near the OT

x		In the OT	
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What sort of disinfectant tray is used?

		Stainless container	
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How often are the disinfectant trays cleaned?

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How often are the rinsing trays cleaned?

		No rinsing tray was present	
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Description of the CSSD

Action	Yes	No	Comments/How?	Source
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There is a CSSD

x			8
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All surgical instruments are fully processed in the CSSD

	x	All instruments are cleaned near the OT	
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The CSSD is cleaned daily

	x		7
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Sinks are cleaned at the end of the day

			7
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There are separate rooms for dirty, clean and sterile goods

x			4,7
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Transport of sterile and contaminated goods is strictly separated

	x	It can be but not used	1,4,7
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The instruments are only passed through machine hatches

	x		
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There is a storage area with racks

x		Yes but not used	1,4,8
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Personal protection

Sufficient personal protection devices are available such as

4,7

Gloves of different materials

	x		7
--	---	--	---

Watertight aprons with long sleeves

	x		7
--	---	--	---

Safety goggles

	x		7
--	---	--	---

Splash screen

	x		7
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Dirty area equipment available in CSSD

Water gun

	x		7
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Hand Shower

	x		7
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Sufficient materials for manual cleaning are available (brushes for external and internal cleaning)

	x		4,7
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Washer-disinfector

x		Not used	3
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Ultrasonic cleaner

	x		3
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Drying machine

x		Broken	8
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Compressed air gun

	x		7
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Other equipment

			8
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How often is the ultrasonic cleaning fluid replaced?

			7
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The used cleaning agents are suitable for the washer-disinfectors

			7
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Inspection and assembly area

Insulation tester

	x		
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Microscope

	x		
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Composition reference (paper or computer)

	x		
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There are composition basket sets of instruments

	x		7
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Instrument set compositions are documented

	x		7
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Of each set a photograph is available

	x		7
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The documentation of set compositions is

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Paper based

			7
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Based on electronic documents (database)

			7
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There are multiple laparoscopic instrument sets for consecutive surgeries

	x		
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Packaging materials available

			4,7
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Cotton sheets

x		For surgical equipment	7
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Crepe paper
 Non-woven sheets
 Sterilization paper bags
 Sterilization pouches
 Schimmelbush drums
 Filter drums
 Sterilization containers
 Heat sealer is available for sealing pouches

	x		7
	x		7
	x		7
x		For ETO machine	7
x		For linen sheets and drapes	7
x		not seen in use	
	x		7
x			

Sterilizing area

Information is available on the chemical and physical behaviour of the items to be sterilized

Sterilisers available

- Steam steriliser (size in liters)
- ETO steriliser
- Sterrad steriliser
- Formaldehyde steriliser
- Other

The steam steriliser is:
 The steam steriliser has a readout
 The steam steriliser has a vacuum cycle
 Sterilisers with toxic gasses are given time to vent

	x		7
x			
x			
	x		
	x		
		Three broken autoclaves were present	
		Manual	8
	x	Only the ETO machine	1
x			1
	x		

Routine sterilizer performance testing

How often is a Bowie Dick test carried out?

The result of the Bowie-Dick test is documented

Routine sterilization performance testing is done by

- Standard Bowie and Dick test pack (textile)
- Disposable Bowie and Dick test pack
- Chemical indicator strips
- Process challenge device such as GKE with chemical indicator
- Helix with chemical indicator
- Electronic process challenge device such as ETS (3M), EBI 16 (Ebro) or DPCD (Interster)
- Process challenge device with Biological Indicator
- If in use: x per week per sterilizer

	x	Never	7
	x		7

	x		7
	x		7
	x		7
	x		7
	x		7
	x		7
	x		7
	x		7
			7

How often is maintenance performed on the autoclaves?

Is there record keeping of the maintenance?

		Once per year and when the autoclave is broken	7
	x		7

Disinfection in Cidex trays is done in the CSSD

	x		
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Reprocessing procedure lap equipment

Before start of first surgery

Action	Yes	No	Comments/How?	Source
Lap equipment is HLD'd	x		In Cidex	8
Lap equipment is sterilised	x		In the formalin chambers	8

In Surgery & Pre-cleaning

Action	Yes	No	Comments/How?	Source
Gloves of OT nurses are changed for surgery after cleaning		x	Only when assisting in surgery	1
After surgery, used lap instruments are stored in a soaking solution	x			4,7
What solution is this?			Tap water	4,7
The transport containers are leak proof, can be cleaned well	x		Stainless bowls	4,7

Transport to cleaning

Action	Yes	No	Comments/How?	Source
Laparoscopic equipment is transported to CSSD		x		8
Regular surgical equipment is transported to CSSD		x		8
Where is the lap equipment moved?			The sink outside the OT	4
Equipment is kept moist		x	Cleaned directly after use	3,4

Cleaning of lap equipment

Action	Yes	No	Comments/How?	Source
Disinfecting				
Lap equipment is disinfected before cleaning		x		4
What disinfectant is used?				4
Lap equipment is rinsed after disinfecting				4
Removing gross soil				
Whenever possible, lap instruments are disassembled.	x			8
Hollow instruments are flushed with water using a spray gun		x		7
Gross soil is removed by rinsing	x		Under running tap water	7
Gross soil is removed using tools	x			4
What tools are used?			Toothbrush	
Automatic methods				
Equipment is ultrasonically cleaned		x		3
Lap equipment is cleaned in washer/disinfector		x		3
Lumens are connected for mechanical flow		x		4
Instruments are loaded in open position		x		4
Manual Cleaning				
What cleaning solution is used?			Soap powder	3,4
Manufacturer instructions for the agent are followed				4
Instruments are fully disassembled	x		If possible, also ligatures and disposables are soaked	3,4
Cleaning solution is deep enough to submerge instruments		x	Under running water and soap powder	4
Appropriate quantity of detergent is used				4

Sufficient brushes for manual cleaning are present for external and internal cleaning)

	x	Only toothbrush	
	x		4
x			4

The lumens are brushed (submerged)

The instrument tips are brushed

Rinsing

Instruments are rinsed

In what basin

What water is used?

x			3,4
		In sink under running tap water	4
		tap water	3,4

Drying

Instruments are dried

Lumens are dried

x			4
x		Lumens are dried with a hairdrier	5,7

Brushes are cleaned at the end of the day

Cleaning tools are disinfected

	x		4
	x		4

Inspection

Action	Yes	No	Comments/How?	Source
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Instruments are inspected for cleanliness

Dirty instruments are reprocessed

Instruments are lubricated. Which lubricant?

Insulation in inspected

Instruments are assembled

Instruments are being opened and spread out for functionality checks

Instrument set compositions are consulted during set assembly

Damaged instruments are removed from a set and replaced by an adequate replacement.

	x		4,7
	x		
			3,4
			3,4
x			4
	x		7
	x		7
	x	Only when broken	7

Packaging and Sterilisation or HLD

Action	Yes	No	Comments/How?	Source
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Steam sterilisation

How often are the lap instruments steam sterilised?

Packaging of sets and packs is done in

Cotton sheets

Crepe paper

Non-woven sheets

Sterilization paper bags

Sterilization pouches

Schimmelbush drums

Filter drums

Sterilization containers

None

Packs using reusable materials are double-wrapped

Indicator tape (autoclave tape) is used for closing the packs packaged in sheets

Indicators are used on every pack

Packs are dry after sterilization

		Never	8
			4,7
			7
			7
			7
			7
			7
			7
			7
			7
			4
			7
			4
			7

Chemical Disinfection

Instruments are chemically high-level disinfected

x			
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Sources

- 1 Expert opinion
- 2 Cidex OPA technical info
- 3 ASTM F1744
- 4 WHO Decontamination and reprocessing of medical devices for Health-care facilities
- 5 APSIC guidelines for disinfection and sterilization of instruments in health care
- 6 Guideline for Disinfection in Healthcare facilities
- 7 SVN Sterilisation assessment form
- 8 Observations in pilot study

