



Detta är ett svar från SBU:s Upplýsingstjást 2018-04-26. SBU:s Upplýsingstjást svarar p avgrnsade medicinska frgor. Svaret bygger inte p en systematisk litteraturoversikt utford av SBU. Drford kan resultaten av litteratursokningen vara ofullstndiga. Kvaliteten p ingende studier har inte bedomts. Detta svar har tagits fram av SBU:s kansli och har inte granskats av SBU:s nmnd.

## Infektionsrisk och tidpunkt fr uppdukning av instrument p operationssal

Postoperativa infektioner r idag den tredje vanligaste formen av vrdrelaterade infektioner efter urinvgsinfektioner och pneumonier. Detta medfr kostnader fr hlso- och sjukvrden och lidande fr enskilda patienter. Det r nskvrt att minska antalet postoperativa srinfektioner och det finns ett flertal freslagna metoder fr att gra detta, ssom handtvtt och luftflde i operationssalar.

Bland rutiner infr operationer ingr uppdukning av de instrument som behvs under operationen. Detta kan utforas antingen innan eller efter patienten kommer in p operationssalen. Ju lngre tid instrumenten ligger uppdukade, desto mer kar risken att de kontamineras.  andra sidan r fler personer i rrelse nr patienten kommer in, vilket i sig ocks kar risken fr kontaminering.

Vanligt r att man dukar upp instrumenten i frvg och tcker med steril operationsduk. Nackdelen d r att operationssalen inte utnyttjas effektivt vilket medfr kade kostnader.

### Frga:

Vilken evidens finns fr att instrument ska dukas upp innan patienten frs in p operationssal?

### Sammanfattning

Detta r en uppdatering av SBU:s Upplýsingstjnstsvar "Infektionsrisk och tidpunkt fr uppdukning av instrument p operationssal" frn 2012-10-19. Upplýsingstjnsten har inte identifierat ngra studier som svarar p frgestllningen. Dremot identifierades en studie som mjligen kan vara av intresse [1].



## Avgränsningar

Vi har gjort sökningar (se avsnittet ”Litteratursökning”) i databaserna PubMed, Embase, Cochrane Library, CRD och Cinahl. Vi har även gått igenom referenslistor till de artiklar som lästes i fulltext.

## Resultat från sökningen

Upplysningstjänstens litteratursökning genererade totalt 1 294 träffar. Sju referenser identifierades i referenslistor. Vi läste alla artikelsammanfattningar. Av dessa bedömde vi att 57 artiklar kunde vara relevanta. Dessa läste vi i fulltext. Inga artiklar bedömdes svara på frågeställningen, men en artikel ingår som lästips.

Upplysningstjänstens litteratursökning genererade totalt 1 294 träffar. Sju referenser identifierades i referenslistor. En person läste alla artikel-sammanfattningar. Av dessa bedömdes att 57 artiklar skulle kunna vara relevanta. Dessa läste en person i fulltext. Inga artiklar bedömdes svara på frågeställningen, men en artikel ingår som lästips. Observera att vi inte bedömde kvaliteten på varken översikterna eller de inkluderade studierna. Det är därför möjligt att flera av studierna kan ha lägre kvalitet än vad SBU inkluderar i sina ordinarie utvärderingar.

## Projektgrupp

Detta svar är sammanställt av Laura Lintamo, Jessica Dagerhamn och Miriam Entesarian Matson och är en uppdatering av ett tidigare svar sammanställt av Jessica Dagerhamn och Jan Liliemark vid SBU.



## Litteratursökning

PubMed via NLM 2017-07-14		
Uppdukning av instrument i operationssalar		
	Söktermer	Antal ref
<b>Intervention</b>		
1.	"Operating Rooms"[Mesh] OR "Surgical Instruments"[Mesh:NoExp] OR "Operating Room Nursing"[Mesh] OR "operating room"[Title/Abstract] OR "operating rooms"[Title/Abstract] OR "operating theatre"[Title/Abstract] OR "surgical instrument"[Title/Abstract] OR "surgical instruments"[Title/Abstract] OR (instrument*[Title/Abstract] AND (setup[Title/Abstract] OR set-up[Title/Abstract] OR set up[Title/Abstract] OR setups[Title/Abstract] OR surgery[Title/Abstract] OR surgical[Title/Abstract] OR preparation[Title/Abstract]))	90 608
<b>Utfallsmått</b>		
2.	"Surgical Wound Infection"[Mesh] OR "Infection Control"[Mesh] OR "Cross Infection"[Mesh] OR "Air Microbiology/prevention and control"[Mesh] OR "Postoperative Complications"[Mesh:NoExp] OR "Equipment Contamination"[Mesh]	44 5536
3.	"surgical site infection"[Title/Abstract] OR "surgical site infections"[Title/Abstract] OR "surgical wound infection"[Title/Abstract] OR "surgical wound infections"[Title/Abstract] OR "postoperative infection"[Title/Abstract] OR "postoperative infections"[Title/Abstract] OR "postoperative wound infection"[Title/Abstract] OR "postoperative wound infections"[Title/Abstract] OR "postoperative complication"[Title/Abstract] OR "postoperative complications"[Title/Abstract] OR "post-operative infection"[Title/Abstract] OR "post-operative infections"[Title/Abstract] OR "post-operative wound infection"[Title/Abstract] OR "post-operative wound infections"[Title/Abstract] OR "post-operative complication"[Title/Abstract] OR "post-operative complications"[Title/Abstract] OR "infection control"[Title/Abstract] OR "cross infection"[Title/Abstract]	91 427
4.	2 OR 3	489 152
<b>Studietyp (RCT + SÖ)</b>		
5.	"randomized controlled trial"[Title/Abstract] OR "randomized controlled trial"[Publication Type] OR "random"[Title/Abstract] OR "randomly"[Title/Abstract] OR "randomised"[Title/Abstract] OR "randomized"[Title/Abstract] OR "review"[Publication Type] OR "systematic review"[Title/Abstract] OR systematic*[Title/Abstract] OR systematic[sb]	3 476 434
<b>Final</b>		
6.	1 AND 4 AND 5 <b>Filters activated:</b> Publication date from 2012/05/01 to 2017/07/14.	663
<b>Studietyp RCT</b>		
7.	"randomized controlled trial"[Title/Abstract] OR "randomized controlled trial"[Publication Type] OR "random"[Title/Abstract] OR "randomly"[Title/Abstract] OR "randomised"[Title/Abstract] OR "randomized"[Title/Abstract]	1 021 340
8.	1 AND 4 AND 7 <b>Filters activated:</b> Publication date from 2012/05/01 to 2017/07/14	304
<b>Studietyp SÖ</b>		
9.	"review"[Publication Type] OR "systematic review"[Title/Abstract] OR systematic*[Title/Abstract] OR systematic[sb]	2 599 923
10.	1 AND 4 AND 9 <b>Filters activated:</b> Publication date from 2012/05/01 to 2017/07/14	437



Embase via embase.com 2017-07-14		
Uppdukning av instrument i operationssalar		
	Söktermer	Antal ref
<b>Intervention</b>		
1.	'operating room'/exp OR 'surgical equipment'/exp OR 'surgical instrument' OR 'operating room personnel'/exp AND [embase]/lim AND [1-5-2012]/sd NOT [14-7-2017]/sd	164 493
<b>Utfallsmått</b>		
2.	'surgical infection'/exp OR 'cross infection'/exp AND [embase]/lim AND [1-5-2012]/sd NOT [14-7-2017]/sd	16 328
<b>Studietyper (RCT + SÖ)</b>		
3.	'randomized controlled trial'/exp OR 'randomized controlled trial' OR 'random' OR 'randomly' OR 'randomised' OR 'randomized':ti,ab AND [embase]/lim AND [1-5-2012]/sd NOT [14-7-2017]/sd	496 943
4.	'systematic review'/exp OR 'systematic review' OR systematic*:ti,ab AND [embase]/lim AND [1-5-2012]/sd NOT [14-7-2017]/sd	195 274
5.	3 OR 4	636 173
<b>Final</b>		
6.	1 AND 2 AND 3 (RCT)	420
7.	1 AND 2 AND 4 (SÖ)	130
8.	1 AND 2 AND 5 (RCT + SÖ)	476

Cochrane Library 2017-07-13		
Uppdukning av instrument i operationssalar		
	Söktermer	Antal ref
<b>Intervention</b>		
1.	"Operating Rooms"[Mesh] OR "Surgical Instruments"[Mesh:NoExp] OR "Operating Room Nursing"[Mesh]	1019
2.	"operating room" OR "operating rooms" OR "operating theatre" OR "surgical instrument" OR "surgical instruments" OR (instrument* AND (setup OR set-up OR set up OR setups OR surgery OR surgical OR preparation)):ti,ab,kw	7402
3.	1 OR 2	7613
<b>Utfallsmått</b>		
4.	"Surgical Wound Infection"[Mesh] OR "Infection Control"[Mesh] OR "Cross Infection"[Mesh] OR "Air Microbiology/prevention and control"[Mesh] OR "Postoperative Complications"[Mesh:NoExp]	21 635
5.	"surgical site infection" OR "surgical site infections" OR "surgical wound infection" OR "surgical wound infections" OR "postoperative infection" OR "postoperative infections" OR "postoperative wound infection" OR "postoperative wound infections" OR "postoperative complication" OR "postoperative complications" OR "post-operative infection" OR "post-operative infections" OR "post-operative wound infection" OR "post-operative wound infections" OR "post-operative complication" OR "post-operative complications" OR "infection control" OR "cross infection":ti,ab,kw	32 622
6.	4 OR 5	33 294



<b>Final</b>		
7.	3 AND 6 Publication Year from 2012 to 2017	653
	Cochrane Reviews (212) Other Reviews (10) Trials (417) (i mapp, ej i EndNote) Methods Studies (0) Technology Assessments (7) Economic Evaluations (7)	

CRD 1 maj 2012		
<b>Uppdukning av instrument i operationsalar</b>		
	<b>Söktermer</b>	<b>Antal ref</b>
<b>Intervention</b>		
1.	MeSH DESCRIPTOR Operating Rooms EXPLODE ALL TREES	46
2.	MeSH DESCRIPTOR Surgical Instruments EXPLODE ALL TREES	73
3.	<b>MeSH DESCRIPTOR Operating Room Nursing EXPLODE ALL TREES</b>	1
4.	("operating room") OR ("operating rooms") OR ("surgical instrument") OR ("surgical instruments") OR ("operating theatre")	582
5.	(instrument*)	2629
6.	(setup) OR (set-up) OR (set up) OR (setups) OR (surgical) OR (preparation) OR (surgery)	12921
7.	5 AND 6	1171
8.	1 OR 2 OR 3 OR 6 OR 7	1618
<b>Utfallsmått</b>		
9.	MeSH DESCRIPTOR Surgical Wound Infection EXPLODE ALL TREES	216
10.	MeSH DESCRIPTOR Infection Control EXPLODE ALL TREES	199
11.	MeSH DESCRIPTOR Cross Infection EXPLODE ALL TREES	258
12.	MeSH DESCRIPTOR Air Microbiology EXPLODE ALL TREES	3
13.	<b>MeSH DESCRIPTOR Postoperative Complications EXPLODE ALL TREES</b>	1859
14.	("surgical site infection") OR ("surgical site infections") OR ("surgical wound infection") OR ("surgical wound infections")	257
15.	("postoperative infection") OR ("postoperative infections") OR ("postoperative wound infection") OR ("postoperative wound infections") OR ("postoperative complication") OR ("postoperative complications") OR ("post-operative infection") OR ("post-operative infections") OR ("post-operative wound infection") OR ("post-operative wound infections") OR ("post-operative complication") OR ("post-operative complications") OR ("infection control") OR ("cross infection")	1839
16.	9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15	2634
<b>Final</b>		
17.	8 AND 16	372



Cinahl via EBSCO 2017-07-13		
Uppdukning av instrument i operationssalar		
	Söktermer	Antal ref
<b>Intervention</b>		
1.	(MH "Surgical Instruments") OR (MH "Operating Room Personnel") OR (MH "Surgery Schedule") OR (MH "Operating Rooms") OR (MH "Surgical Equipment and Supplies") OR (MH "Perioperative Nursing")	21 430
2.	TX "operating room" OR TX "operating rooms" OR TX "surgical instrument" OR TX "surgical instruments" OR TX "operating theatre"	30 986
3.	TX instrument*	180 127
4.	TX setup OR TX set-up OR TX set up OR TX setups OR TX surgical OR TX preparation OR TX surgery	564 770
5.	3 AND 4	53 874
6.	1 OR 2 OR 5	87 439
<b>Utfall</b>		
7.	(MH "Surgical Wound Infection") OR (MH "Infection Control") OR (MH "Cross Infection") OR (MH "Infection Control (Saba CCC)") OR (MH "Infection Risk (Saba CCC)") OR (MH "Infection Control (Iowa NIC)") OR (MH "Infection Protection (Iowa NIC)") OR (MH "Air Microbiology/PC") OR (MH "Postoperative Complications") OR (MH "Surgical Recovery Delay (Saba CCC)")	60 900
8.	TX "surgical site infection" OR TX "surgical site infections" OR TX "surgical wound infection" OR TX "surgical wound infections" OR TX "postoperative infection" OR TX "postoperative wound infection" OR TX "postoperative infections" OR TX "postoperative wound infections" OR TX "infection control" OR TX "cross infection" OR TX "postoperative complication" OR TX "postoperative complications" OR TX "post-operative infection" OR TX "post-operative wound infection" OR TX "post-operative infections" OR TX "post-operative wound infections" OR TX "post-operative complication" OR TX "post-operative complications"	89 508
9.	7 OR 8	89 513
<b>Final</b>		
10.	6 AND 9 <b>Limiters:</b> Published Date: 20120101-20171231, Peer Reviewed; Exclude MEDLINE records; Publication Type: Clinical Trial, Meta Analysis, Practice Guidelines, Randomized Controlled Trial, Review, Systematic Review	62
11.	6 AND 9 <b>Limiters:</b> Published Date: 20120101-20171231, Peer Reviewed; Exclude MEDLINE records; Randomized Controlled Trials; Publication Type: Clinical Trial, Randomized Controlled Trial,	8
12.	6 AND 9 <b>Limiters:</b> Published Date: 20120101-20171231, Peer Reviewed; Exclude MEDLINE records; Publication Type: Meta Analysis, Practice Guidelines, Review, Systematic Review	53

## Referenser

1. Chosky SA, Modha D, Taylor GJ. Optimisation of ultraclean air. The role of instrument preparation. J Bone Joint Surg Br 1996;78:835-7.