



November 1, 2017

URGENT: MEDICAL DEVICE CORRECTION

ATTENTION:

Risk Management/Recall Administration

Our records indicate that you may have received some of the affected products listed below.

Description of the Problem:

Cook Medical is initiating a voluntary market correction for the products and lot numbers listed in Attachment 1. This correction involves applying an additional label that states "Heparin Coated" to the affected products. Cook Medical has identified that the label of these products does not explicitly state that they are heparin coated. The products are labeled with the correct catalog identifier, which includes the suffix "BH" that indicates the product is heparin coated. However, users who are not familiar with the "BH" nomenclature may not be aware that the product contains heparin.

This correction is only related to the label, not the heparin coated products. Only the lot numbers listed are impacted; other lot numbers have been labelled with the heparin coated statement.

To date, no adverse events have been reported due to this issue. Under rare circumstances, these products could unknowingly be used in a patient with a heparin allergy or a patient with a history of Heparin Induced Thrombocytopenia (HIT). Either of these situations could potentially result in serious injury or death.

Details of Affected Devices:

PRODUCT BRAND NAME	CATALOG IDENTIFIER (Prefix/Suffix)	INTENDED USE	LOT NUMBERS
Amplatz Stiff Wire Guide Amplatz Extra Stiff Wire Guide Amplatz Ultra Stiff Wire Guide Coons Interventional Wire Guide Fixed-Core Wire Guide	THSF-/-BH		
Amplatz Extra Stiff Whisker Wire Guide Amplatz Extra Stiff Wire Guide Amplatz Ultra Stiff Wire Guide Fixed-Core Wire Guide Rosen Curved Wire Guide	THSCF-/-BH	Used to assist in inserting catheters, introducer sheaths, and other	Refer to Attachment
Bentson Wire Guide	THSFB-/-BH TSFB-/-BH	medical devices in vascular applications.	1 for lot listing.
Bentson Plus Wire Guide	TSFBP-/-BH		
Fixed-Core Wire Guide	C-SCF-/-BH C-SF-/-BH SCF-/-BH SF-/-BH TSCF-/-BH TSCFR-/-BH TSF-/-BH		





PRODUCT BRAND NAME	CATALOG IDENTIFIER (Prefix/Suffix)	INTENDED USE	LOT NUMBERS
Double Flexible-Tipped Wire Guide	C-DOC-/-BH C-TDOC-/-BH TDOC-/-BH		
Movable-Core Wire Guide	TCMTNA-/-BH TMTNA-/-BH TMT-/-BH	Used to assist in inserting catheters,	
Fixed-Core Bentson	TSCFB-/-BH	introducer sheaths, and other	
Newton Wire Guide	THSFNA-/-BH TSCFNA-/-BH THSCFNB-/-BH TSFNA-/-BH TSFNB-/-BH	medical devices in vascular applications.	
Newton Wire Guide TFE Coated Curved Newton LLT	TSCFNB-/-BH		
Disposable Reuter Tip-Deflecting Wire Guide	DTDW-/-BH	Intended for use in curving or deflecting catheter tips for pulmonary	
Reuter Tip-Deflecting Wire Guide	TDW-/-BH	angiography, selective angiography, translumbar aortography, bronchography, repositioning of central venous catheter tips, and other vascular and non-vascular applications.	Refer to Attachment 1 for lot listing.
Femoral Artery Pressure Monitoring Set	C-PMS-300- CHILDRENS-A-032988	Used for arterial pressure monitoring and blood sampling.	
Central Venous Catheter Tray	C-PUMY-5014J-35-8.0- BH-OTP	The central venous catheter is designed for treatment of critically ill patients and is suggested for: 1. Continuous or intermittent drug infusions 2. Central venous blood pressure monitoring (CVP) 3. Acute hyperalimentation 4. Blood sampling 5. Delivery of whole blood or blood products 6. Simultaneous, separate infusion of drugs	
Left Atrial Catheter Set	C-ULAP-5.0-60-DTK-BH	Used for postoperative monitoring of left atrial pressure. Pigtail tip configuration helps to maintain proper catheter tip position in left atrium.	





Action to be Taken:

- Examine inventory immediately to determine if you have affected product and quarantine affected product(s) for additional labeling. If you no longer have affected product in your inventory, complete the Acknowledgement and Receipt Form and return it via fax (888.912.8457) or email to cookmedical5791@stericycle.com.
- 2. If you have affected product in your inventory, you have two options:
 - If your facility prefers to add the additional labeling without assistance from a representative, please see the instructions in Attachment 2, use the enclosed labels to complete the correction, and complete the Acknowledgement and Receipt form. To request assistance or additional labels, please contact Stericycle at 855.215.4967.
 - 2. If you prefer for a representative to support you in applying the labels, please contact Stericycle at 855.215.4967.

Once your affected product has been correctly labeled, please complete the Acknowledgement and Receipt Form within **5 business days** and send it via fax (888.912.8457) or email to cookmedical5791@stericvcle.com.

- For recall related questions, including requests for additional labeling or assistance in labeling, please contact Stericycle at 855.215.4967.
- 4. Please complete the Acknowledgement and Receipt Form within 5 business days of receipt of this letter.
- 5. Report adverse events to Cook Medical Customer Relations by phone at 800.457.4500 or 812.339.2235, Monday through Friday between 7:30 am and 5:00 pm (Eastern time), or by email via CustomerRelationsNA@CookMedical.com.

Adverse events or quality problems experienced with the use of this product may also be reported to the FDA:

- Online at: http://www.fda.gov/Safety/MedWatch/HowToReport/default.htm (form available to fax or mail)
- Call the FDA at: 1.800.FDA.1088

Transmission of this Notice:

This notice must be shared with appropriate personnel, including down to the user level, within your organization or to any organization where the potentially affected devices have been transferred.

This action is being taken with the knowledge of the Food and Drug Administration.

We recognize this situation is a disruption to your normal operations and we sincerely apologize. Thank you again for your immediate assistance in this matter. Should you have any questions or concerns, please contact Cook Medical Customer Relations at 800.457.4500 or 812.339.2235. We look forward to your response.

Larry D. Pool Director, Post market Cook Incorporated

Attachments:

Attachment 1 – Affected lot numbers Attachment 2 – Instructions for labeling

Attachment 3 - Labels



COOK INCORPORATED
750 DANIELS WAY, P.O. BOX 489
BLOOMINGTON, IN 47402-0489 U.S.A.
PHONE: 812.339.2235 TOLL FREE: 800.457.4500
WWW.COOKMEDICAL.COM

ACKNOWLEDGEMENT AND RECEIPT FORM

Please reply to this notification within **5 business days** of receipt, even if you do not have any of the affected products.

Please complete the following information regarding the (Reference Attachment 1):	correction on products containing heparin coating
Date:	Customer Account Number:
Customer Name:	Street Address:
City:	State, Postal Code:
Form Completed By:	Department/Phone Number:
Actions Taken: 1. I have received the 01Nov2017 Medical Device Correction and understand the instructions provided in the letter. 2. I have examined my inventory and have no affected product. 3. I have examined my inventory and affected product remains in inventory. a. If Yes to Question #3, additional labels have been applied to all remaining inventory. (Note: If you require assistance with labeling activities, please contact Stericycle at 855.215.4967.) 4. I have experienced an adverse event associated with the affected product. 5. If yes, please explain the adverse event below:	
Additional Action for Distributors: This Medical Device Correction should be shared with ap organization where the potentially affected devices have Please confirm the following: 1. I have notified my customers of the correction.	



COOK INCORPORATED 750 DANIELS WAY, P.O. BOX 489 BLOOMINGTON, IN 47402-0489 U.S.A. PHONE: 812.339.2235 TOLL FREE: 800.457.4500 WWW.COOKMEDICAL.COM

Affected Product Information:

Please list the quantity of affected product at your facility to be relabeled or indicate "NONE" if affected product is

no longer in your inventory or with your customers GLOBAL PRODUCT NUMBER (GPN)	LOT NUMBER	QUANTITY
		1

Other Information:

Upon completion, please return this Acknowledgement and Receipt Form to Stericycle Expert Solutions via fax or email.

Fax: 888.912.8457

Email: cookmedical5791@stericycle.com

- For information regarding the correction, contact Stericycle Expert Solutions at 855.215.4967.
- For medical questions or to report adverse events contact Cook Medical Customer Relations at 800.457.4500 or 812.339.2235.



Name of Devices	Catalog Identifier	Global Product Number	Lot Number Range			
Name of Devices	(Prefix/Suffix)	(GPN)	From	То		
		G00789 G04483 G00958 G04970 G01202 G06430 G02372 G07496 G02539 G09955 G03042 G09958 G03044 G10051 G03127 G10052 G03219 G10309 G03264 G10522 G03290 G27034 G03334 G27036 G03373 G27039 G03430 G28779 G03577 G28789 G03606 G28791 G03875 G28793 G00964 G03546 G01382 G03547 G01428 G03560 G02246 G03723 G02447 G03884 G02541 G03889 G02676 G03903 G03043 G03973 G03043 G03973 G03043 G03973 G03044 G04422 G03372 G04167 G03349 G04422 G03372 G04167 G03349 G04422 G03372 G04933 G03441 G08310 G03463 G10523 G03475 G12232 G03523 G29853 G00692 G02633 G00793 G03749 G00924 G03882 G01662 G06805 G01369 G12259 G01431 G28873 G01750 G31470	3730001	6164916		
Amplatz Extra Stiff Wire Guide Amplatz Stiff Wire Guide Amplatz Ultra Stiff Wire Guide Coons Interventional Wire Guide Fixed-Core Wire Guide	THSF- / -BH		F3729969	F4922979		
			NS4928020	NS6203182		
	THSCF- / -BH	G01382 G03547 G01428 G03560 G02246 G03723 G02447 G03884	3733552	6175191		
Amplatz Extra Stiff Whisker Wire Guide Amplatz Extra Stiff Wire Guide Amplatz Ultra Stiff Wire Guide Fixed-Core Wire Guide Rosen Curved Wire Guide		G02676 G03903 G03043 G03973 G03053 G04113 G03062 G04149 G03327 G04167	F3729974	F4923948		
Nosen Carved Wile Guide		G03372 G04933 G03441 G08310 G03463 G10523 G03475 G12232	NS4927345	NS6177894		
	THSFB- / -BH	C02502	F3813488	F4859795		
	ПЭГD- / -DП	G02303	NS5327890	NS6060291		
Bentson Wire Guide		G00793 G03749	3730884	5984142		
	TSFB-/-BH	G01062 G06805 G01369 G12259	F3746894	F4920488		
				G01750 G31470	NS4937520	NS6252870
Bentson Plus Wire Guide	TSFBP- / -BH	G09783	3771080	5942053		
		G09784	F4265639			



Name of Devices	Catalog Identifier Global Product Numb		r Lot Number Range		
Name of Devices	(Prefix/Suffix)	(GPN)	From	То	
	C-SCF-/-BH G01967 G03509 G03509 G03509 G03509 G03509 G0291 C-SF-/-BH G02291 G02326 SCF-/-BH G00224 SF-/-BH G00224 SF-/-BH G00289 F4087814 NS4929840 F4119548 NS5171771 G00432 G00970 G00435 G01052 G00437 G01084 G00440 G01283 G00442 G01337 G00448 G00440 G01283 G00453 G00453 G01380 G00459 G00459 G00459 G00459 G00465 G01419 G00465 G01481 G00469 G00525 G00472 G00525 G00472 G01530 G00475 G00489 G00473 G01540 G00474 G01567 G00489 G00493 G00475 G01580 G00475 G00489 G00475 G01580 G00475 G00489 G00508 G01878 G00510 G01974 G00508 G0089 G00508 G01878 G00511 G00512 G00514 G02482 G00514 G02482 G00515 G00525 G02848 G00525 G02848 G00525 G02848 G00528 G00525 G02848 G00528 G00525 G02848 G00528 G00528 G03028	G01967 G29402	F3753452	F4925547	
		NS6171324			
	C-SE- / -RH		F3922830	F4218188	
	C-31 - 7 - D11	G02326	NS5470403	NS6020850	
	SCE / BH	G00224	F4087814	F4741344	
	301-7-011	000224	NS4929840	NS5104065	
	SE_ / _RH	G00289	F4119548	F4920483	
	31-7-011	000207	NS5171771	NS6144080	
Fixed-Core Wire Guide		G00435 G01052 G00437 G01084 G00440 G01283 G00442 G01337 G00448 G01363 G00453 G01380 G00459 G01419 G00465 G01438 G00467 G01481 G00469 G01527	3730875	6180567	
-ixed-Core Wire Guide	TSCF- / -BH	G00477 G01567 G00489 G01639 G00493 G01649 G00508 G01878 G00510 G01974 G00512 G02247 G00514 G02482 G00518 G02588 G00523 G02842 G00525 G02848	F3730082	F4924418	
		G00532 G03671 G00540 G03707 G00542 G03990 G00544 G04735 G00547 G06809 G00551 G06810 G00553 G06830 G00846 G06969 G00867 G07627 G00901 G08949 G00907 G11673 G00916	NS4928022	NS6177724	



Profit	Name of Devices	Catalog Identifier	Global Product Number		Lot Num	ber Range
Fixed-Core Wire Guide	Name of Devices	(Prefix/Suffix)	(GPN)		From	То
Fixed-Core Wire Guide TSF- /-BH			G00586 G00588 G00591 G00597 G00599	G00586 G00662 G00588 G00665 G00591 G00671 G00597 G00675 G00599 G00681 G00601 G00808 G00603 G01190 G00606 G01288 G00610 G01316 G00612 G01331 G00618 G01710	3730101	6181269
C-DOC-/-BH G00625 G07183 G00632 G07966 G00632 G07966 G00632 G08466 G00631 G00644 G00984 F3749839 F4849938 F4856722 F4628078 F4916737 G00363 G00363 G00363 G00363 F3739663 F4916737 G001745 G0017	Fixed-Core Wire Guide	TSF- / -BH	G00603 G00606 G00610 G00612 G00618		G01190 G01288 G01316 G01331	F3734860
C-DOC-/-BH G03256 N55085893 N55827127			G00625 G00632 G00639 G00644	G07183 G07966 G08466	NS4927349	NS6203187
NS5085893 NS5827127 NS5085893 NS5827127		C DOC / DU	C0205/		F3749839	F4849938
Double Flexible-Tipped Wire Guide G00361 G00363 G01365 G03745 3763189 F3739663 6106860 F4916737 Movable-Core Wire Guide TCMTNA- /-BH G01716 G01717 G01720 G01765 G03137 3774481 6145673 Movable-Core Wire Guide TMTNA- /-BH G01720 G01765 G03137 F3876320 F4894841 Movable-Core Wire Guide TMTNA- /-BH G06850 F4608907 NS5144675 Fixed-Core Bentson TSCFB- /-BH G00865 G01863 G03865 G03918 G04011 G02865 F3734676 F4911986 Fixed-Core Bentson THSFNA- /-BH G10524 G01863 G03865 F3734676 F4911986 Fixed-Core Bentson TSCFB- /-BH G10524 G01863 G03865 F3734676 F4911986 Fixed-Core Bentson THSFNA- /-BH G10524 G00865 G00866 G00866 G00568 G00568 G00566 G00566 G00566 G00566 G00566 G00566 G00866 G00		C-DOC- / -BH	G03256		NS5085893	NS5827127
TDOC-/-BH TOOC-/-BH G00361 G00363 G00363 G00363 G00363 G00363 G003645 G003745 F3739663 F4916737 TCMTNA-/-BH G01710 G01720 G01720 G01720 G01765 G03137 F3876320 F4894841 TMTNA-/-BH G06850 F4608907 TMT-/-BH G01663 3758468 6167814 TSCFB-/-BH G01663 G03918 G04011 G02650 G28843 G03865 G28844 THSFNA-/-BH G10525 G28843 G03865 G28844 NS4938980 NS6144078 THSFNA-/-BH G10524 G10525 G28843 G0366 G00563 G00566 G	De la Fle da Trecedor Colle	C-TDOC- / -BH	G29434		F4628078	F4856722
Movable-Core Wire Guide	Double Flexible-Hpped Wire Guide		G00363	3763189	6106860	
Movable-Core Wire Guide TCMTNA- / -BH G01717 G01720 G01765 G03137 TMTNA- / -BH G06850 TMT- / -BH G06850 TMT- / -BH G01663 TSCFB- / -BH G10524 G10525 THSFNA- / -BH G00558 G00563 G00564 G00564 G00564 G00566 G00567 THSCFNB- / -BH G11843 G1843 G1841 G1844 G184		TDOC- / -BH			F3739663	F4916737
Movable-Core Wire Guide TCMTNA- / -BH			G03745		NS4980257	NS6098990
Movable-Core Wire Guide				3774481	6145673	
Movable-Core Wire Guide G03137 NS4963396 NS5144675 TMTNA- /-BH G06850 F4608907 TMT-/-BH G01663 3758468 6167814 Fixed-Core Bentson TSCFB-/-BH G00865 G03918 G04011 G02250 G28843 G04011 G02250 G28843 G03865 G28844 F3734676 F4911986 G03863 G04011 NS6144078 THSFNA-/-BH G10524 G10525 F3762971 F4692445 NS590271 Newton Wire Guide TSCFNA-/-BH G00558 G00560 G01556 G00562 G02266 G00563 G00563 G00566 G00568 G002866 G00568 G003191 G002266 G02266 G02266 G02266 G00266 G003191 F3753484 F4887253 NS4938982 NS5932560 THSCFNB-/-BH G11843 F4556472 F4718761		TCMTNA- / -BH	G01720		F3876320	F4894841
TMT- / -BH G01663 3758468 6167814 TMT- / -BH G01663 3758468 6167814 TSCFB- / -BH G01863 G03918 G04011 G02650 G28843 G03865 G28844 NS4938980 NS6144078 THSFNA- / -BH G10525 G10524 G10525 F3762971 F4692445 NS5043714 NS5900771 TSCFNA- / -BH G00562 G00562 G00562 G00563 G02866 G00563 G02866 G00566	Movable-Core Wire Guide				NS4963396	NS5144675
Fixed-Core Bentson TSCFB-/-BH G00865 G01863 G04011 G02650 G28843 G03865 G28844 NS4938980 NS6144078 THSFNA-/-BH G10524 G10525 F3762971 F4692445 NS5903714 NS5900771 TSCFNA-/-BH G00865 G01863 G04011 G02650 G28844 NS4938980 NS6144078 THSFNA-/-BH G10524 G10525 F3762971 F4692445 NS5903714 NS5900771 TSCFNA-/-BH G00558 G00560 G01556 G00560 G01556 G00560 G01556 G00566 G00563 G02266 G02266 G02266 G02266 G00568 G00568 G00568 G02856 G00568 G		TMTNA- / -BH	G06850		F4608907	
Fixed-Core Bentson TSCFB- / -BH G01863 G04011 G02650 G28843 G03865 G28844 NS4938980 NS6144078 THSFNA- / -BH G10524 G10525 F3762971 F4692445 NS5903714 NS5900771 TSCFNA- / -BH G00558 G00560 G0		TMT- / -BH	G01663		3758468	6167814
THSCFNB-/-BH G11843 THSCFNB-/-BH G11843 THSCFNB-/-BH G11843 THSCFNB-/-BH G11843 THSCFNB-/-BH G11843 THSCFNB-/-BH G11843 TSCFNA- THSCFNB-/-BH G11843 TSCFNA- THSCFNB-/-BH G11843 TSCFNA- TS	F: 10 P	TCCED / DU			F3734676	F4911986
Newton Wire Guide THSFNA-/-BH G10524 G10525 F3762971 F4692445 NS5900771 RS5900771 TSCFNA-/-BH G00558 G00560 G00562 G00563 G00563 G00566 G00568 G00566 G00568 G00568 G00568 F3753484 F4887253 NS4938982 NS5932560 THSCFNB-/-BH G11843	Fixed-Core Bentson	15CFB- / -BH	G02650		NS4938980	NS6144078
Newton Wire Guide TSCFNA- / -BH G10525 F3762971 F4692445 NS5900771 RS5900771 G00558 G00560 G00562 G00562 G00563 G00563 G00266 G00564 G00568 G00566 G00568 G00566 G00568 G00568 THSCFNB- / -BH G11843					3733537	5803299
Newton Wire Guide TSCFNA- / -BH TSCFNB- / -BH TSCFNB- / -BH TSCFNB- / -BH Rewton Wire Guide NS5043714 NS5900771 3766161 5925080 F3753484 F4887253 RS5932560 F4556472 F4718761		THSFNA- / -BH			F3762971	F4692445
Newton Wire Guide TSCFNA- / -BH TSCFNB- / -BH TSCFNB- / -BH TSCFNB- / -BH G00560 G00562 G00562 G002266 G002266 G002266 G002856 G003191 NS4938982 NS5932560 F4556472 F4718761			0.0020		NS5043714	NS5900771
Newton Wire Guide TSCFNA- / -BH G00562 G00563 G00566 G00566 G00568 THSCFNB- / -BH G11843 G00562 G02266 G02266 G02266 G02856 G03191 NS4938982 NS5932560 F4718761			G00540		3766161	5925080
G00568 G03191 NS4938982 NS5932560 THSCFNB-/-BH G11843	Newton Wire Guide	TSCFNA- / -BH	G00562	G02266	F3753484	F4887253
THSCFNB-/-BH G11843			G00566		NS4938982	NS5932560
		THECENIA / DI	C11043		F4556472	F4718761
		I LIOCLING- / -RH	G11043		NS6024246	



Name of Devices Catalog I		atalog Identifier Global Product Number		Lot Number Range					
Name of Devices	(Prefix/Suffix)	(GPN)		From	То				
		G00702	G00774	3741877	5929842				
	TSFNA- / -BH	G00703 G00706	G00829 G28878	F3749985	F4903656				
Newton Wire Guide		G00709		NS4928037	NS5963186				
Newton wire Guide		G00716	G00796	3744567	6253002				
	TSFNB- / -BH	TSFNB- / -BH	TCENIR / RH	G00717 G00720	G00894	F3763300	F4900931		
				NS4928039	NS59824				
	G00573 G00904 G00575 G01271 TSCFNB- / -BH G00577 G01281	3741882	6142463						
Newton Wire Guide TFE Coated Curved Newton LLT		TSCFNB- / -BH	TSCFNB-/-BH	TSCFNB- / -BH	TSCFNB- / -BH	TSCFNB- / -BH G00	TSCFNB- / -BH G00577	G01281	F3884311
The council curved Newton EE		G00579 G00581	G02845 G05624	NS5044201	NS5963180				
		G07672		3730008	6164931				
Disposable Reuter Tip-Deflecting Wire Guide	DTDW-/-BH	G07751		F4374635	F4791430				
		G08159		NS5034700	NS5562947				
Paytor Tip Deflecting Wire Childs	TDW / DU	TDW (DU	TD)4/ / D)	G07351		F4423853	F4898351		
Reuter Tip-Deflecting Wire Guide TD	TDW- / -BH	G28702		NS5072022	NS6166764				



ATTACHMENT 1 HEPARIN COATED CATHETER SETS FIELD ACTION - AFFECTED LOT NUMBERS

Name of Devices	Catalog Identifier	Global Product Number (GPN)	Lot Numbers
Femoral Artery Pressure Monitoring Set	C-PMS-300-CHILDRENS-A-032988	G04448	All lots
Central Venous Catheter Tray	C-PUMY-5014J-35-8.0-BH-OTP	G10560	All lots
Left Atrial Catheter Set	C-ULAP-5.0-60-DTK-BH	G07498	All lots





ATTACHMENT 2 – INSTRUCTIONS FOR LABELING

Step 1

- Determine if your product is included in the affected lot ranges by comparing your lot number to the listing provided.
- If your product is not affected, complete the Acknowledgement and Receipt Form.
- If your product is affected, proceed to Step 2.



Step 2

- Remove a "Heparin Coated" label from the label sheet provided and apply to the top right corner of your affected unit.
 - If you need additional labels, please contact Stericycle at 855.215.4967.

If you would like assistance, representatives are available to support you. To request assistance, please contact Stericycle at 855.215.4967



COOK	COOK*	COOK.	COOK.	COOK*
Heparin Coated				
COOK*	COOK*	COOK*	COOK*	COOK.
Heparin Coated				
COOK.	COOK*	COOK	COOK	COOK*
Heparin Coated				
COOK	COOK*	COOK*	COOK*	COOK*
Heparin Coated				
COOK*	COOK*	COOK*	COOK*	COOK*
Heparin Coated				
COOK	COOK*	COOK*	COOK*	COOK"
Heparin Coated				
COOK*	COOK*	COOK*	COOK.	COOK*
Heparin Coated				
COOK*	COOK*	COOK*	COOK*	COOK*
Heparin Coated				
COOK'	COOK*	COOK*	COOK	COOK*
Heparin Coated				
COOK*	COOK*	COOK*	COOK.	COOK*
Heparin Coated				