# STS Congenital Anesthesiology Report All Operations

	Partio	cipant	STS			
	Last Year	Last 4 Years	Last Year	Last 4 Years		
	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016		
	N %	N %	N %	N %		
Number of Records <sup>1</sup>						
Type of Procedure Cardiovascular Surgery CPB Cardiovascular No CPB Cardiovascular Support Devices (ECMO, VAD with w/out CPB) Cardiology Diagnostic Interventional Electrophysiology Other Thoracic Non-Cardiac/Non-Thoracic w/Anesthesia CPB -Non Cardiovascular <sup>2</sup> Other						
Age Group Neonates (0-30 days) Infants (31 days - 1 year) Children (> 1 year - < 18 years) Adults (18 years+)						
Provider Anesthesiologist Only Anesthesiologist + Trainee Anesthesiologist + Advanced Provider (CRNA/AA)						
Adverse Events Missing None Any Adverse Event Oral/Nasal Injury-Bleeding Respiratory Arrest Difficult Intubation/Reintubation Stridor / Sub-glottic Stenosis						

<sup>&</sup>lt;sup>1</sup>See Attachment F of the Report Overview for a Glossary of Report Variables <sup>2</sup>Available with data version 3.3 only

# STS Congenital Anesthesiology Report All Operations

		Partio	cipant			S	TS	
	Last	Year	Last 4	4 Years	Last	Year	Last 4	Years
	Jan 2016	- Dec 2016	Jan 2013	- Dec 2016	Jan 2016	- Dec 2016	Jan 2013	- Dec 2016
	N	%	N	%	N	%	N	%
Adverse Events - Continued								
Extubation								
Endotracheal Tube Migration								
Airway Injury								
Arrhythmia - Central Venous Line Placement								
Myocardial Injury - Central Venous Line Placement								
Vascular Compromise -								
Central Venous Line Placement								
Pneumothorax - Central Venous Line Placement								
Vascular Access								
Hematoma req. relocation of catheter placement								
Arterial Puncture								
Intravenous/Intra-arterial Air Embolism								
Bleeding - Regional Anesthetic Site								
Intrathecal Puncture - Regional								
Local Anesthetic Toxicity - Regional								
Neurologic Injury - Regional								
Anaphylaxis/Anaphylactoid Reaction								
Non-allergic Drug Reaction								
Medication Administration								
Medication Dosage								
Intraoperative Recall								
Malignant Hyperthermia								
Protamine Reaction								
Cardiac Arrest - related to anesthesia care								
Cardiac Arrest - Unrelated to anesthesia care <sup>1</sup>								
TEE related Esophageal Bleeding / Rupture								
Esophageal Chemical Burn								
TEE related Airway Compromise								
TEE related Hemodynamic Compromise <sup>2</sup>								
TEE Related-Extubation								
Complications during patient transfer								
Peripheral Nerve injury due to positioning								
Arterial Line Placement- Extremity ischemia <sup>1</sup>								
Anesthesia Equipment Malfunction/ Failure <sup>1</sup>								
Intravenous Infiltration <sup>1</sup>								

<sup>&</sup>lt;sup>1</sup>Available with data versions 3.22 and 3.3 only <sup>2</sup>Available with data version 3.3 only

#### STS Congenital Anesthesiology Report All Operations

#### Participant 99999 January 1, 2013 - December 31, 2016

	Participant				STS			
		Year	Last 4	l Years		Year	Last 4	4 Years
	Jan 2016			- Dec 2016	Jan 2016			- Dec 2016
	N	%	N	%	N	%	N	%
Adverse Events - Continued Integument Injury¹ Bronchospasm¹ Hemoptysis¹ Postop Nausea/Vomiting req. admission¹ Vomiting or Aspiration on Induction/Emergence¹ Emergence Delirium requiring Medication¹ Laryngospasm requiring medication¹ Unplanned need to remain intubated postprocedure due to anesthesia factors¹ Ocular Injury (corneal abrasion or injury)¹ Pulmonary Hypertensive Crisis¹ Hypercyanotic Episode (Tet Spell)¹ Other¹								

<sup>1</sup>Available with data versions 3.22 and 3.3 only

		Partio	cipant			S	ΓS	
		Year	Last 4	l Years		Year		Years
		- Dec 2016						- Dec 2016
Number of Decords	N	%	N	%	N	%	N	%
Number of Records								
Surgical Strategy for Anesthesia Reported Cases CPB Only CPB and Cross Clamp DHCA and/or Cerebral Perfusion <sup>1</sup> No CPB								
Age Group Neonates (0-30 days) Infants (31 days - 1 year) Children (> 1 year - < 18 years) Adults (18 years+)								
STAT Mortality Category Category 1 Category 2 Category 3 Category 4 Category 5 Not Assigned								
Risk Factors Any Non-Cardiac Congenital Abnormality Any Chromosomal Abnormality Any Syndrome								
Pre-Operative Medications Anticoagulants Antiarrhythmics Prostaglandin Cardiac Medications IV Inotropes IV Systemic Vasodilators IV Systemic Vasoconstrictors IV Pulmonary Vasodilators								

<sup>&</sup>lt;sup>1</sup>Includes Antegrade or Retrograde, data collection does not distinguish between the two types

Participant 99999 January 1, 2013 - December 31, 2016

### **Interaoperative Procoagulants, Total Dosage**

<sup>&</sup>lt;sup>1</sup>Among patients with Procoagulent Usage for the Specified Procagulent

	Age Group								
		nates		ants		dren	Adu		
	Participant N %	STS N %	Participant N %	STS N %	Participant N %	STS N %	Participant N %	STS N %	
Invasive Arterial Blood Pressure <sup>1</sup> Radial	,,	,		,, ,,	, i	,,		,	
Brachial Axillary Ulnar Femoral Central/Umbilical Other									
Missing  Cutdown No									
Yes <i>Missing</i>									
Central Venous Pres. Monitoring² Internal Jugular Femoral Subclavian Other PICC³ Missing									
Surgeon Placed Central Lines <sup>3</sup> No Yes <i>Missing</i>									
Ultrasound Usage <sup>4</sup>									
None Arterial Line Central Venous									
<sup>1</sup> Among Patients with Arteri- <sup>2</sup> Among Patients with Percu- <sup>3</sup> Among Version 3.3 patient- <sup>4</sup> Available with data version	uatneous Central Press s only	with multiple groups are sure = Yes. Patients with i	multiple groups are reported	ce in each applicable group d multiple times, once in ea	ach applicable group.				

	Nec	onates	l Info	Age	Group	dren	l	ults
	Participant N %	STS N %	Participant %	STS N %	Participant %	STS N %	Participant N %	STS N %
Ultrasound Usage - Continued Both <i>Missing</i>			,	,			., ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Transfusion No Yes <i>Missing</i>								

Participant 99999

January 1, 2013 - December 31, 2016

Units Transfused by Age Group and Selected Procedures<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Data version 3.3 only patients with a Transfusion of a Non-Autologous Blood Product during or after the procedure

Participant 99999

January 1, 2013 - December 31, 2016

Units Transfused by Age Group and Selected Procedures<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Data version 3.3 only patients with a Transfusion of a Non-Autologous Blood Product during or after the procedure

	D ::	. ,	STS			
		cipant				
	Last Year	Last 4 Years	Last Year	Last 4 Years		
	N %	N %	Jan 2016 - Dec 2016 N %			
Name I ania Manifesia a Dation to	IN %	IN %	N %	N %		
Neurologic Monitoring Patients Near Infrared Spectroscopy (NIRS) Transcranial Doppler (TCD) Bispectral Index (BIS) Other						
Regional Anesthesia Patients Any epidural / caudal catheter Any epidural / caudal single shot Intrathecal single shot Paravetebral Block (single shot or catheter) <sup>1</sup>						
Extubated in OR <sup>2</sup> No Yes Missing						
Reintubated after Initial Extubation <sup>2</sup> No Yes Missing						
Time to Final Extubation <sup>3</sup> Overall 0 - 6 Hours 6 - 24 Hours > 24 Hours Neonates 0 - 6 Hours 6 - 24 Hours						
> 24 Hours Infants 0 - 6 Hours 6 - 24 Hours > 24 Hours						

<sup>&</sup>lt;sup>1</sup>Among CPB Patients version 3.3 only
<sup>2</sup>Among Patients where an Endotracheal Intubation was Performed
<sup>3</sup>Among Patients not extubated in the OR, calculated as the time between skin closure and initial extubation or skin closure and final extubation if reintubated Anesthesiology CPB/No CPB Operations -- 122

#### Participant 99999 January 1, 2013 - December 31, 2016

	Pai	ticipant	STS			
	Last Year	Last 4 Years	Last Year	Last 4 Years		
		Jan 2013 - Dec 2016		Jan 2013 - Dec 2016		
	N %	N %	N %	N %		
Time to Final Extubation <sup>1</sup> - continued Children 0 - 6 Hours 6 - 24 Hours > 24 Hours Adults 0 - 6 Hours 6 - 24 Hours > 24 Hours > 24 Hours	Jan 2016 - Dec 201 N %	3 Jan 2013 - Dec 2016 N %	Jan 2016 - Dec 2016 N %	Jan 2013 - Dec 2016 N %		

<sup>1</sup>Among Patients not extubated in the OR, calculated as the time between skin closure and initial extubation or skin closure and final extubation if reintubated

Participant 99999 January 1, 2013 - December 31, 2016

### Time to Final Extubation if NOT extubated in Operating Room

Participant 99999 January 1, 2013 - December 31, 2016

### Time to Final Extubation if NOT extubated in Operating Room

	Parti	cipant	STS			
	Last Year	Last 4 Years	Last Year	Last 4 Years		
	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016		
	N %	N %	N %	N %		
Adverse Events						
Missing						
None						
Any Adverse Event						
Oral/Nasal Injury-Bleeding						
Respiratory Arrest						
Difficult Intubation/Reintubation						
Stridor / Sub-glottic Stenosis						
Extubation						
Endotracheal Tube Migration						
Airway Injury						
Arrhythmia - Central Venous Line Placement						
Myocardial Injury - Central Venous Line Placement						
Vascular Compromise -						
Central Venous Line Placement						
Pneumothorax - Central Venous Line Placement						
Vascular Access						
Hematoma req. relocation of catheter placement						
Arterial Puncture						
Intravenous/Intra-arterial Air Embolism						
Bleeding - Regional Anesthetic Site						
Intrathecal Puncture - Regional						
Local Anesthetic Toxicity - Regional						
Neurologic Injury - Regional						
Anaphylaxis/Anaphylactoid Reaction						
Non-allergic Drug Reaction						
Medication Administration						
Medication Dosage						
Intraoperative Recall						
Malignant Hyperthermia						
Protamine Reaction						
Cardiac Arrest - related to anesthesia care						
Cardiac Arrest - Unrelated to anesthesia care <sup>1</sup>						
TEE related Esophageal Bleeding / Rupture						
Esophageal Chemical Burn						

<sup>&</sup>lt;sup>1</sup>Available with data versions 3.22 and 3.3 only

	Participant				STS			
		Year		4 Years		Year		Years
				- Dec 2016		- Dec 2016		- Dec 2016
	N	%	N	%	N	%	N	%
Adverse Events - Continued TEE related Airway Compromise TEE related Hemodynamic Compromise¹ TEE Related-Extubation Complications during patient transfer Peripheral Nerve injury due to positioning Arterial Line Placement- Extremity ischemia² Anesthesia Equipment Malfunction/ Failure² Intravenous Infiltration² Integument Injury² Bronchospasm² Hemoptysis² Postop Nausea/Vomiting req. admission² Vomiting or Aspiration on Induction/Emergence² Emergence Delirium requiring Medication² Laryngospasm requiring medication² Unplanned need to remain intubated postprocedure due to anesthesia factors² Ocular Injury (corneal abrasion or injury)² Pulmonary Hypertensive Crisis² Hypercyanotic Episode (Tet Spell)² Other²								

<sup>&</sup>lt;sup>1</sup>Available with data version 3.3 only <sup>2</sup>Available with data versions 3.22 and 3.3 only

	No	onates	l Infs	Age	Group	dren	Ι ΔΑ	ults
	Participant N %	STS N %	Participant %	STS N %	Participant %	STS N %	Participant %	STS N %
Catheterization Case Type Diagnostic Interventional Electrophysiological  Disposition Under Anesthesia¹ Planned Discharged after PACU/Recovery Admit: Hosp. Floor Admit: ICU Other Location Unplanned Admit: Hosp. / ICU Expired under Anesthetic Mgmt.								

<sup>&</sup>lt;sup>1</sup>Available with data versions 3.22 and 3.3 only

	Partio	cipant	S	TS
	Last Year	Last 4 Years	Last Year	Last 4 Years
	Jan 2016 - Dec 2016			Jan 2013 - Dec 2016
	N %	N %	N %	N %
Number of Records				
Type of Procedure Diagnostic Interventional Electrophysiology				
Age Group Neonates (0-30 days) Infants (31 days - 1 year) Children (> 1 year - < 18 years) Adults (18 years+)				
Provider Anesthesiologist Only Anesthesiologist + Trainee Anesthesiologist + Advanced Provider (CRNA/AA)				
Adverse Events Missing None Any Adverse Event Oral/Nasal Injury-Bleeding Respiratory Arrest Difficult Intubation/Reintubation Stridor / Sub-glottic Stenosis Extubation Endotracheal Tube Migration Airway Injury Arrhythmia - Central Venous Line Placement Myocardial Injury - Central Venous Line Placement Vascular Compromise -				
Central Venous Line Placement Pneumothorax - Central Venous Line Placement Vascular Access				

	Participant		STS	
	Last Year	Last 4 Years	Last Year	Last 4 Years
	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016	Jan 2016 - Dec 2016	Jan 2013 - Dec 2016
	N %	N %	N %	N %
Advance Events Continued				
Adverse Events - Continued				
Hematoma req. relocation of catheter placement				
Arterial Puncture				
Intravenous/Intra-arterial Air Embolism				
Bleeding - Regional Anesthetic Site				
Intrathecal Puncture - Regional				
Local Anesthetic Toxicity - Regional				
Neurologic Injury - Regional				
Anaphylaxis/Anaphylactoid Reaction				
Non-allergic Drug Reaction				
Medication Administration				
Medication Dosage				
Intraoperative Recall				
Malignant Hyperthermia				
Protamine Reaction				
Cardiac Arrest - related to anesthesia care				
Cardiac Arrest - Unrelated to anesthesia care <sup>1</sup>				
TEE related Esophageal Bleeding / Rupture				
Esophageal Chemical Burn				
TEE related Airway Compromise				
TEE related Hemodynamic Compromise <sup>2</sup>				
TEE Related-Extubation				
Complications during patient transfer				
Peripheral Nerve injury due to positioning				
Arterial Line Placement- Extremity ischemia <sup>1</sup>				
Anesthesia Equipment Malfunction/ Failure <sup>1</sup>				
Intravenous Infiltration <sup>1</sup>				
Integument Injury <sup>1</sup>				
Bronchospasm <sup>1</sup>				
Hemoptysis <sup>1</sup>				
Postop Nausea/Vomiting req. admission <sup>1</sup>				
Vomiting or Aspiration on Induction/Emergence <sup>1</sup>				
Emergence Delirium requiring Medication <sup>1</sup>				
Laryngospasm requiring medication <sup>1</sup>				

<sup>&</sup>lt;sup>1</sup>Available with data versions 3.22 and 3.3 only

<sup>&</sup>lt;sup>2</sup>Available with data version 3.3 only

#### Participant 99999 January 1, 2013 - December 31, 2016

<sup>1</sup>Available with data versions 3.22 and 3.3 only