



STS Congenital Heart Surgery Data Summary
Adults

STS Period Ending 12/31/2017

Table 1: Adults number submitted, in analysis, and operative mortality

	STS	
	Last 1 Year Jan 2017 - Dec 2017	Last Four Years Jan 2014 - Dec 2017
Number of Operations/Patients		
Operations in Analysis ¹	2,515	9,826
Patients in Analysis ²	2,381	9,272
Operative Mortality³		
Number of Mortalities	30	129
Number Eligible	2,370	9,248
Mortality Percent	1.3%	1.4%
Mortality (95% CI)	(0.9 , 1.8)	(1.2 , 1.7)

¹Analysis includes only operations classified as "CPB" or "No CPB, Cardiovascular"

²Patient Numbers represent distinct patient admissions

³Mortality numbers are patient-based only for admission in the analysis population at sites with adequate mortality data



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Table 2: Primary diagnosis, 35 Most Frequent for Adults, Last 4 Years (Jan 2014 - Dec 2017)

Primary Diagnosis	STS	
	N	% of All
Pulmonary insufficiency	1,291	13.1%
Aortic insufficiency	511	5.2%
ASD, Secundum	449	4.6%
Arrhythmia, Pacemaker, Indication for replacement	438	4.5%
Aortic aneurysm (including pseudoaneurysm)	404	4.1%
Cardiac, Other	341	3.5%
Aortic stenosis, Valvar	308	3.1%
Ebstein's anomaly	284	2.9%
Tricuspid regurgitation, non-Ebstein's related	282	2.9%
Aortic stenosis, Subvalvar	280	2.8%
Mitral regurgitation	273	2.8%
ASD, Sinus venosus	235	2.4%
Aortic insufficiency and aortic stenosis	232	2.4%
Conduit failure	231	2.4%
Partial anomalous pulmonary venous connection (PAPVC)	223	2.3%
TOF	185	1.9%
Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA)	178	1.8%
Aortic valve, Other	153	1.6%
Endocarditis	148	1.5%
Pulmonary insufficiency and pulmonary stenosis	147	1.5%
Cardiomyopathy (including dilated, restrictive, and hypertrophic)	134	1.4%
Open sternum with open skin (includes membrane placed to close skin)	126	1.3%
AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	125	1.3%
VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	120	1.2%
Arrhythmia	112	1.1%
Pulmonary stenosis, Valvar	110	1.1%
Miscellaneous, Other	104	1.1%
TOF, Pulmonary stenosis	80	0.8%
Arrhythmia, Atrial	77	0.8%
Pericardial effusion	76	0.8%
Arrhythmia, Heart block	76	0.8%
Single ventricle, Tricuspid atresia	73	0.7%
DCRV	72	0.7%
Mitral regurgitation and mitral stenosis	72	0.7%
Postoperative bleeding	68	0.7%



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Table 3: Primary procedure, 35 Most Frequent for Adults, Last 4 Years (Jan 2014 - Dec 2017)

Primary Procedure	STS		
	N	% of All	% Mort.
Valve replacement, Pulmonic (PVR)	802	8.2%	0.1%
Pacemaker procedure	548	5.6%	0.2%
Valvuloplasty, Tricuspid	439	4.5%	0.7%
RVOT procedure	439	4.5%	0.2%
ASD repair, Patch	352	3.6%	0.6%
Aortic aneurysm repair	319	3.3%	1.3%
Pacemaker implantation, Permanent	317	3.2%	1.6%
Valve replacement, Mitral (MVR)	310	3.2%	3.5%
Valve replacement, Aortic (AVR), Bioprosthetic	255	2.6%	0.4%
Valve replacement, Tricuspid (TVR)	244	2.5%	2.9%
PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	244	2.5%	2.9%
Arrhythmia surgery - atrial, Surgical Ablation	244	2.5%	0.4%
Valve replacement, Aortic (AVR), Mechanical	230	2.3%	0.0%
Ebstein's repair	224	2.3%	1.8%
Conduit placement, RV to PA	223	2.3%	1.8%
Mediastinal exploration	222	2.3%	1.4%
Valvuloplasty, Mitral	208	2.1%	1.4%
Transplant, Heart	187	1.9%	5.9%
Aortic root replacement, Valve sparing	175	1.8%	0.0%
Delayed sternal closure	162	1.7%	0.6%
Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	160	1.6%	0.6%
Coronary artery bypass	152	1.6%	1.3%
PA, reconstruction (plasty), Main (trunk)	145	1.5%	0.7%
Conduit reoperation	137	1.4%	1.5%
ICD (AICD) implantation	134	1.4%	1.5%
ASD repair, Patch + PAPVC repair	130	1.3%	0.8%
Aortic stenosis, Subvalvar, Repair	127	1.3%	0.0%
Explantation of pacing system	125	1.3%	0.0%
Aortic root replacement, Mechanical	125	1.3%	2.4%
Fontan revision or conversion (Re-do Fontan)	118	1.2%	10.2%
PAPVC repair	114	1.2%	0.0%
Valvuloplasty, Aortic	106	1.1%	0.0%
VSD repair, Patch	100	1.0%	0.0%
Aortic arch repair	95	1.0%	5.3%
Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	89	0.9%	1.1%