



STS Congenital Heart Surgery Data Summary Infants



STS Period Ending 12/31/2018

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

	STS	
	Last 1 Year Jan 2018 - Dec 2018	Last Four Years Jan 2015 - Dec 2018
Number of Operations/Patients		
Operations in Analysis ¹	10,234	41,287
Patients in Analysis ²	8,100	33,062
Operative Mortality³		
Number of Mortalities	184	838
Number Eligible	7,640	30,930
Mortality Percent	2.4%	2.7%
Mortality (95% CI)	(2.1 , 2.8)	(2.5 , 2.9)

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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Duke Clinical Research Institute

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Table 2: Primary diagnosis, 35 Most Frequent for Infants, Last 4 Years (Jan 2015 - Dec 2018)

Primary Diagnosis	STS	
	N	% of All
VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	5,403	13.1%
TOF, Pulmonary stenosis	3,815	9.2%
AVC (AVSD), Complete (CAVSD)	3,487	8.4%
Patent ductus arteriosus	2,609	6.3%
Open sternum with open skin (includes membrane placed to close skin)	2,308	5.6%
Hypoplastic left heart syndrome (HLHS)	2,258	5.5%
Coarctation of aorta	1,187	2.9%
Vascular ring	833	2.0%
Single ventricle, Tricuspid atresia	823	2.0%
Cardiac, Other	758	1.8%
Pulmonary atresia, VSD (Including TOF, PA)	654	1.6%
DORV, TOF type	589	1.4%
TOF	567	1.4%
Single ventricle, DILV	558	1.4%
Miscellaneous, Other	557	1.3%
Pulmonary atresia, IVS	533	1.3%
VSD, Multiple	464	1.1%
Pulmonary atresia, VSD-MAPCA	451	1.1%
ASD, Secundum	421	1.0%
DORV, VSD type	408	1.0%
Single ventricle, Heterotaxia syndrome	395	1.0%
VSD, Type 4 (Muscular)	358	0.9%
DORV, TGA type	352	0.9%
Single ventricle, Unbalanced AV canal	350	0.8%
VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	349	0.8%
AVC (AVSD), Intermediate (transitional)	330	0.8%
VSD, Type 3 (Inlet) (AV canal type)	329	0.8%
Mitral regurgitation	321	0.8%
Aortic arch hypoplasia	312	0.8%
Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	288	0.7%
TOF, AVC (AVSD)	286	0.7%
Pulmonary stenosis, Valvar	275	0.7%
Arrhythmia, Heart block, Acquired	270	0.7%
Pericardial effusion	260	0.6%
Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	251	0.6%



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Table 3: Primary procedure, 35 Most Frequent for Infants, Last 4 Years (Jan 2015 - Dec 2018)

Primary Procedure	STS		
	N	% of All	% Mort.
VSD repair, Patch	5,345	13.7%	0.6%
AVC (AVSD) repair, Complete (CAVSD)	3,040	7.8%	2.0%
Delayed sternal closure	2,979	7.7%	0.1%
Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	2,393	6.1%	1.7%
TOF repair, Ventriculotomy, Transanular patch	1,969	5.1%	1.6%
Mediastinal exploration	1,399	3.6%	0.5%
Superior Cavopulmonary anastomosis(es) + PA reconstruction	1,241	3.2%	1.9%
TOF repair, Ventriculotomy, Nontransanular patch	1,192	3.1%	0.6%
PA banding (PAB)	1,026	2.6%	6.2%
TOF repair, No ventriculotomy	1,002	2.6%	0.5%
PDA closure, Surgical	889	2.3%	4.6%
Vascular ring repair	737	1.9%	0.1%
Coarctation repair, End to end, Extended	726	1.9%	0.8%
Pacemaker implantation, Permanent	680	1.7%	1.2%
RVOT procedure	663	1.7%	1.4%
Aortic arch repair	636	1.6%	2.8%
DORV, Intraventricular tunnel repair	575	1.5%	3.5%
Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	538	1.4%	7.2%
PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	488	1.3%	2.5%
Valvuloplasty, Mitral	464	1.2%	2.4%
Transplant, Heart	456	1.2%	2.2%
TAPVC repair	366	0.9%	3.3%
Shunt, Systemic to pulmonary, Central (shunt from aorta)	352	0.9%	8.2%
Pulmonary venous stenosis repair	349	0.9%	7.7%
Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	331	0.9%	2.7%
Valvuloplasty, Pulmonic	303	0.8%	2.3%
Coarctation repair, End to end	266	0.7%	1.1%
VSD repair, Primary closure	255	0.7%	0.8%
Norwood procedure	249	0.6%	6.8%
TOF repair, RV-PA conduit	232	0.6%	2.2%
AVC (AVSD) repair, Intermediate (Transitional)	231	0.6%	0.9%
Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	227	0.6%	4.4%
HemiFontan	226	0.6%	0.9%
Conduit placement, RV to PA	223	0.6%	4.0%
Aortic arch repair + VSD repair	219	0.6%	3.7%