

STS Congenital Heart Surgery Data Summary

July 2005 - June 2009 Procedures

Children (>1 year to < 18 years)

Table 1: Number of patients/operations submitted and in analysis, discharge mortality, and complexity information, by year

Year	Operations Submitted	Operations in Analysis	Patients in Analysis	Discharge Mortality		Aristotle Mean Basic	
				# / Eligible	% of patients	Complexity Score	Complexity Level
Jul 05 - Jun 06	6,831	5,711	5,378	64 / 5,289	1.2%	6.5	2.1
Jul 06 - Jun 07	7,764	6,577	6,168	54 / 6,088	0.9%	6.6	2.2
Jul 07 - Jun 08	8,632	7,221	6,707	96 / 6,620	1.5%	6.6	2.2
Jul 08 - Jun 09	8,149	6,735	6,262	71 / 6,245	1.1%	6.6	2.2
Total	31,376	26,244	24,515	285 / 24,242	1.2%	6.6	2.2

Note: Analysis includes only operations classified as "CPB" or "No CPB, Cardiovascular". Patient numbers represent distinct patient admissions. Mortality numbers are patient-based only for admissions in the analysis population at sites with adequate mortality data.

Table 2: Primary diagnosis (N = 26,244), 25 Most Frequent

Diagnosis	Incidence	
	#	% of all
ASD, Secundum	2,286	8.7
VSD, Type 2 (Perimembranous)(Paramembranous)(Conoventricular)	1,299	4.9
Aortic stenosis, Subvalvar	1,293	4.9
Hypoplastic left heart syndrome (HLHS)	1,166	4.4
Conduit failure	819	3.1
ASD, Sinus venosus	724	2.8
Coarctation of aorta	709	2.7
TOF	683	2.6
Arrhythmia	657	2.5
Pulmonary insufficiency	647	2.5
AVC (AVSD), Partial (Incomplete) (PAVSD) (ASD, Primum)	630	2.4
Arrhythmia, Pacemaker, Indication for replacement	628	2.4
Cardiomyopathy	625	2.4
[Missing diagnosis]	621	2.4
Cardiac, Other	611	2.3
Miscellaneous, Other	582	2.2
Mitral regurgitation	560	2.1
Aortic insufficiency	534	2.0
Single ventricle, Tricuspid atresia	526	2.0
Vascular ring	459	1.7



Database Summary - Last 4 Years - Children - 2

Diagnosis	Incidence	
	#	% of all
Single ventricle, DILV	404	1.5
Arrhythmia, Heart block, Acquired	358	1.4
Pulmonary atresia, VSD (Including TOF, PA)	320	1.2
AVC (AVSD), Complete CAVSD	293	1.1
Partial anomalous pulmonary venous connection (PAPVC)	291	1.1

Table 3: Primary procedure based on Aristotle Basic Complexity Score (N = 26,244), 25 Most Frequent

Procedure	Incidence		Discharge Mortality		Basic Complexity Score	Basic Complexity Level
	#	% of all	# / Eligible	%		
ASD repair, Patch	2,176	8.3	0 / 2,161	0.0%	3.0	1
VSD repair, Patch	1,313	5.0	2 / 1,300	0.2%	6.0	2
Fontan, TCPC, External conduit, Fenestrated	1,264	4.8	19 / 1,257	1.5%	9.0	3
Aortic stenosis, Subvalvar, Repair	1,164	4.4	5 / 1,144	0.4%	6.3	2
Pacemaker implantation, Permanent	1,046	4.0	5 / 1,041	0.5%	3.0	1
Conduit reoperation	974	3.7	8 / 969	0.8%	8.0	3
Valvuloplasty, Mitral	881	3.4	2 / 873	0.2%	8.0	3
Pacemaker procedure	860	3.3	3 / 853	0.4%	3.0	1
Valve replacement, Pulmonic (PVR)	721	2.7	1 / 708	0.1%	6.5	2
Fontan, TCPC, Lateral tunnel, Fenestrated	718	2.7	7 / 696	1.0%	9.0	3
Fontan, TCPC, External conduit, Nonfenestrated	691	2.6	11 / 684	1.6%	9.0	3
Transplant, Heart	644	2.5	23 / 643	3.6%	9.3	3
ASD repair, Primary closure	586	2.2	0 / 566	0.0%	3.0	1
RVOT procedure	553	2.1	5 / 544	0.9%	6.5	2
Valvuloplasty, Aortic	504	1.9	4 / 493	0.8%	8.0	3
AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	496	1.9	0 / 486	0.0%	4.0	1
Mediastinal exploration	475	1.8	11 / 470	2.3%	1.5	1
Vascular ring repair	467	1.8	1 / 464	0.2%	6.0	2
PAPVC repair	377	1.4	1 / 373	0.3%	5.0	1
Valve replacement, Mitral (MVR)	356	1.4	9 / 350	2.6%	7.5	2
Conduit placement, RV to PA	354	1.3	3 / 354	0.8%	7.5	2
ICD (AICD) implantation	306	1.2	1 / 306	0.3%	4.0	1
PA, Reconstruction (plasty), Branch, Central (within the hilar bifucation)	290	1.1	3 / 286	1.0%	7.8	2
Other procedure	282	1.1	3 / 282	1.1%		
Ross procedure	275	1.0	0 / 274	0.0%	10.3	4